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10 April 2014

CURRICULUM VITAE

NAME: F. Chandler Davidson

TITLE: Research Professor,
Department of Sociology,
Radoslav Tsanoff Professor of Public Affairs Emeritus

ADDRESS: Department of Sociology MS 28
Rice University
P.O. Box 1892
Houston, Texas 77251-1892

PHONE NUMBERS: 713-669-0521
713-540-0478

DATE OF BIRTH: 13 May 1936

EDUCATION: University of Texas B.A. 1961
Princeton University M.A. 1966
Princeton University Ph.D. 1969

MILITARY SERVICE: U.S. Navy (Honorable Discharge, 1962)

TEACHING EXPERIENCE:
1966-1968 Instructor, Rice University
1968-1973 Assistant Professor, Rice University
1973-1983 Associate Professor with tenure, Rice University
1983-2003 Professor, Rice University
2003- Professor Emeritus, Research Professor

****NB: Post-retirement events in red****

HONORS:
Senior Honors Program, Dept. of Philosophy, University of Texas, 1960-61
Undergraduate Philosophy Scholarship, University of Texas, 1960-61
Phi Beta Kappa, University of Texas, 1961
Fulbright Scholar, University of Poitiers, Faculté des Lettres, 1961-62
Woodrow Wilson Fellow, Princeton University, 1963-64

Brown College (Rice University), Teaching Excellence Award in the Humanities
1969-70

Outstanding Texas author, 1972, Theta Sigma Phi, Austin Professional Chapter
of Women in Communications (award given for Biracial Politics).

Research Fellow, National Endowment for the Humanities, 1976-77

Rice University Provost Lecturer, 1985

Controversies in Minority Voting, co-edited with Bernard Grofman, chosen as an
Outstanding Book on Human Rights in the United States by the Gustavus
Myers Center for the Study of Human Rights, 1993

Quiet Revolution in the South, co-edited with Bernard Grofman, chosen as the
winner of the Richard F. Fenno Prize awarded annually by the Legislative
Studies section of the American Political Science Association for the best
book in legislative studies published in the previous year, 1995

Ally Award, Center for the Healing of Racism (Houston), 1996

George R. Brown Award for Superior Teaching, Rice University, 1997, 1999,
2000, 2002

George R. Brown Award for Excellence in Teaching, Rice University, 1998

Texas Philosophical Society of Texas, 1998-2006

Minority Vote Dilution named to Howard University Press Classic Editions
Library Series, 2004

C.M. and Demaris Hudspeth Award for Outstanding Service as a Faculty
Sponsor of a Student Organization, Rice University, 2010.

Rice University Veteran of the Year, Veterans Day 2011

Recipient, Association of Rice University Black Alumni, Legacy Award for
"advancing the interests of Black students, faculty and alumni at Rice through
exceptional dedication and commitment," Rice University Centennial
Celebration, 2012

Recipient, Association of Rice Alumni, Meritorious Service Award, 2013.

MEMBERSHIP ON ADVISORY PANELS, COMMISSIONS

Voting Rights Research Advisory Board, University of California, Berkeley, 2004-05

National Commission on the Voting Rights Act, 2005-06

Advisory Committee, Democracy, Diversity, and Voice

(The Democracy Collaborative, University of Maryland) 2004-05

Advisory Committee, Voting Rights Research Initiative, Warren College of Law,
University of California at Berkeley, 2004-06

BIOGRAPHICAL ENTRIES:

Who's Who in America

Who's Who in The Southwest

Who's Who in American Education

JOINT APPOINTMENTS:

Professor, Department of Political Science, Rice University (1997-2003)

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS:

American Sociological Association
American Political Science Association
American Association of University Professors

SELECTED RICE UNIVERSITY ADMINISTRATIVE SERVICE:

1973-75 Chair, University Library Committee
1977-78 President, Rice Chapter, American Association of University Professors
1979-83 Chair, Department of Sociology
1986-89 Chair, Department of Sociology
1987-88 Chair, Rice Task Force on Substance Abuse
1988 Chair, Search Committee, Director of Office of Minority Affairs
1988-90 Co-founder and first coordinator of interdisciplinary teaching team for "Intellectual Foundations of the Social Sciences," core curriculum course
1993-96 Chair, Committee on Undergraduate Admission
1995-03 Chair, Department of Sociology
1997 Chair, President's Ad Hoc Committee to Revise Faculty Dismissal Policy
1999-00 Chair, Committee on Teaching
1998-02 Chair, Inter-institutional Search Committee , University of Texas School of Public Health and Rice University Department of Sociology
2002-03 Chair, Athletic Subcommittee of Faculty Council
2006-07 Chair, Committee on the Rice Undergraduate Program
2009-12 Member, Benefits Committee
2011 Member, Ad Hoc Committee on Phased Retirement
2012- Member, Veterans Affairs Committee

AREAS OF SCHOLARLY ACTIVITY:

Politics and Society
Social Stratification
Race and Ethnic Relations
Electoral Behavior
Texas Politics
Minority Voting Rights

EXTERNAL RESEARCH SUPPORT:

National Endowment for the Humanities, full salary support for the year (1976-77)
National Science Foundation, \$231,331 grant, "Collaborative Research on the Implementation and Effects of the 1965 Voting Rights Act," co-principal investigator with Bernard Grofman, University of California at Irvine (1988-92)

National Science Foundation Law and Social Sciences Program, \$8,500 grant, "Supplementary Grant for Collaborative Research on the Voting Rights Act: The Effects of Changing Electoral Systems on the Election of Women" (NSF SES #88-09329), co-principal investigator with Bernard Grofman and Susan Welch (1989-90).

Rockefeller Foundation, \$50,000 grant, "A Conference on the Voting Rights Act: A Twenty-five Year Perspective," with Thomas Mann and Bernard Grofman, under the auspices of the Brookings Institution (1989-90).

Ford Foundation, \$6,000 grant. "Newspaper Data Base on 1990s Redistricting," Bernard Grofman, principal investigator (1991-93).

Center for Voting Rights and Protection, Inc., Washington D.C. Director of research on ballot security programs as instruments of minority vote suppression.

Lawyers' Committee for Civil Rights Under Law, Washington, D.C. Director of research on the status of minority voting rights in the U.S.

PARTICIPATION IN AMICUS BRIEFS:

"Brief *Amici Curiae* of Historians and Other Scholars in Support of Petitioners," *William Crawford et al., Petitioners, v. Marion County Election Board, et al.*, in the Supreme Court of the United States, Nov. 2007," principal author, 2007.

"Brief of Historians and Social Scientists as *Amici Curiae* in Support of Respondents," *Shelby County, Alabama v. Eric H. Holder, Jr., Attorney General, et al.* in the Supreme Court of the United States, Feb. 2013," principal author, 2013.

CONGRESSIONAL AND LEGISLATIVE TESTIMONY

"Prepared statement of Chandler Davidson, Chair, Department of Sociology, Rice University, Houston, Tex." Voting Rights Act: Hearings before the Subcommittee on the Constitution of the Committee on the Judiciary, United States Senate, 1982 (Volume 2), Serial No. J-97-92; Washington, D.C.: U.S. Government Printing Office, 1983, pp. 293-303.

"Voting Rights Roundtable," Subcommittee on Civil and Constitutional Rights, Judiciary Committee, U.S. House of Representatives, May 25, 1994, invited participant.

"Prepared statement of Chandler Davidson, Radoslav Tsanoff Professor of Public Affairs Emeritus, Rice University: 'An Introduction to the Expiring Provisions of the Voting Rights Act.'" Voting Rights Act: Hearings before the Committee on the Judiciary, United States Senate, May 9, 2006. Invited participant. <http://thomas.loc.gov/cgi-bin/cpquery/T?&report=sr295&dbname=109&>

"Prepared statement of Chandler Davidson: 'Vote Caging'," Hearing on Abusive Robocalls and Vote Caging, Committee on Rules and Administration, United States Senate, February 27, 2008. Invited participant. <http://rules.senate.gov/hearings/2008/022708hrq.htm>

“Prepared statement of Chandler Davidson: ‘The Historical Context of Senate Bill 362,’” Hearings Before the Texas Senate Meeting as a Committee of the Whole to consider a bill to enact a voter photo ID requirement, March 10, 2009. Invited participant.

U. S. SUPREME COURT CITATIONS OF PUBLICATIONS

Thornburg v. Gingles, 478 U.S. 30, 106 S. Ct. 2752 (1986).
Shaw v. Reno, 509 U.S. 630, 113 S. Ct. 2816 (1993).
Johnson v. De Grandy, 512 U.S. 997, 114 S. Ct. 2647 (1994).
Miller v. Johnson, 515 U.S. 900, 115 S. Ct. 2475 (1995).
Bush v. Vera, 517 U.S. 952, 116 S. Ct. 1941 (1996).
Shaw v. Hunt, 517 U.S. 899, 116 S. Ct. 1896 (1996).
Abrams v. Johnson, 521 U.S. 74, 117 S. Ct. 1925 (1997).
Shelby County, Alabama v. Holder, Attorney General, 679 F. 3d 348 (2013)

OTHER RECENT LOWER COURT CITATIONS OF PUBLICATIONS

Northwest Austin Municipal Utility District Number One v. Mukasey, U.S. District Court for the District of Columbia, Civil Action No 06-1384, p. 12 ([*Protecting Minority Voters: The Voting Rights Act at Work, 1982-2005*] 2008).

Democratic National Committee et al., v. Republican National Committee, et al., U.S. District Court, District of New Jersey, Civil Action No 81-3876 (DRD) p. 21. [“Republican Ballot Security Programs: Vote Protection or Minority Vote Suppression—Or Both?”] (2009)

PUBLICATIONS:

Books:

Biracial Politics: Conflict and Coalition in the Metropolitan South, Louisiana State University Press, 1972.
Minority Vote Dilution (editor), Howard University Press, 1984 (paperback ed., 1989).
Race and Class in Texas Politics, Princeton University Press, 1990 (paperback ed. 1992).
Controversies in Minority Voting: The Voting Rights Act in Perspective (ed. with Bernard Grofman), The Brookings Institution, 1992 (hardcover and paperback).
Quiet Revolution in the South: The Impact of the Voting Rights Act, 1965-1990 (ed. with Bernard Grofman), Princeton University Press, 1994 (hardcover and paperback).

Commissioned Reports:

Republican Ballot Security Programs: Vote Protection or Minority Vote

Suppression—or Both?, in co-authorship with Tanya Dunlap, Gale Kenny, and Benjamin Wise, Center for Voting Rights and Protection, Washington, D.C. (2004).

http://www.votelaw.com/blog/blogdocs/GOP_Ballot_Security_Programs.pdf

Protecting Minority Voting Rights: The Voting Rights Act at Work 1982-2005,

National Commission on the Voting Rights Act, Washington, D.C. (2006). (Lawyers' Committee for Civil Rights Under Law), primary author.

http://www.lawyerscommittee.org/admin/voting_rights/documents/files/0023.pdf

Highlights of Hearings of the National Commission on the Voting Rights Act

2005, National Commission on the Voting Rights Act, Washington, D.C. (2006). (Lawyers' Committee for Civil Rights Under Law)

<http://www2.ohchr.org/english/bodies/hrc/docs/ngos/lccr3.pdf>

Selected Articles and Book Chapters :

"A Summer Enrichment Program for Black Pre-Medical students," in co-authorship with Daniel Creson, M.D., Texas Reports on Biology and Medicine, 29 (1971), 443-50.

"Houston Elects a Mayor," in co-authorship with Douglas Longshore, New South: A Quarterly Journal of Southern Affairs, 27 (1972), 47-61.

"Ethnic Attitudes as a Basis for Minority Cooperation in a Southwestern Metropolis," in co-authorship with Charles Gaitz, Social Science Quarterly, 22 (1974), 738-48.

"Are the Poor Different?," in co-authorship with Charles Gaitz, Social Problems, 22 (1974), 230-45.

"Variations in Gender Roles Among Classes," in co-authorship with Virginia Davidson, M.D., Sex Roles: A Journal of Research, 3 (1977), 459-67.

"At-Large Elections and Minority Representation," Social Science Quarterly, 60 (1979), 337-38.

"The Effects of At-Large Elections on Minority Representation: A Review of Historical and Recent Evidence," in co-authorship with George Korbel, Journal of Politics, 43 (1981), 982-1005.

"Reforming a Reform," in Merle Black and John Shelton Reed (eds.), Perspectives on the American South, London, New York, Paris: Gordon and Breach Science Publishers, 1981, 143-49.

"Houston: The City Where the Business of Government is Business," in Wendell Bedichek and Neal Tannahill (eds.), Public Policy in Texas, Glenview, Ill.: Scott, Foresman and Company, 1982, 275-88.

"The Democrats," in Wendell Bedichek and Neal Tannahill (eds.), Public Policy in Texas, Glenview, Ill.: Scott, Foresman and Company, 1982, 160-70.

"Carter Wesley," in Rayford Logan and Jeremy Townsend (eds.), The Dictionary of American Negro Biography, New York and London: W. W. Norton and Company, 1983, 639-40.

- "Minority Vote Dilution: An Overview," in Chandler Davidson (ed.), Minority Vote Dilution, Washington, D.C.: Howard University Press, 1984, 1-23.
- "Nonpartisan Slating Groups in an At-Large Setting," in co-authorship with Luis Fraga, in Chandler Davidson, Minority Vote Dilution, Washington, D.C.: Howard University Press, 1984, 119-43.
- "Ethnic Jokes: An Introduction to Race and Nationality," Teaching Sociology, 15 (1987), 296-302.
- "Slating Groups as Parties in a 'Nonpartisan' Setting," in co-authorship with Luis Fraga, Western Political Quarterly, 41 (1988), 373-90.
- "The Voting Rights Act: A Brief History," in Grofman and Davidson (eds.), Controversies in Minority Voting (1992), 7-51.
- "Postscript: What is the Best Route to a Color-Blind Society?," with B. Grofman, in Grofman and Davidson (eds.), Controversies in Minority Voting (1992), 300-17.
- "The Voting Rights Act: Protecting the Rights of Racial and Language Minorities in the Electoral Process" (Introduction to special issue on the Voting Rights Act), Chicano-Latino Law Review, 13 (1993), 1-14.
- "Editors' Introduction" (in co-authorship with B. Grofman), in Davidson and Grofman (eds.), Quiet Revolution in the South (1994), 3-17.
- "The Recent Evolution of Voting Rights Law Affecting Racial and Language Minorities," in Davidson and Grofman (eds.), Quiet Revolution in the South (1994), 21-37.
- "Texas" (with R. Brischetto, D. Richards, and B. Grofman), in Davidson and Grofman (eds.), Quiet Revolution in the South (1994), 233-70.
- "The Effect of Municipal Election Structure on Black Representation in Eight Southern States," (with B. Grofman) in Davidson and Grofman (eds.), Quiet Revolution in the South (1994), 301-34.
- "The Voting Rights Act and the Second Reconstruction" (with B. Grofman) in Davidson and Grofman (eds.), Quiet Revolution in the South (1994), 378-87.
- "African Americans and Politics," The New Handbook of Texas (1996) Vol. 1, 51-55.
- "Voting Rights Act of 1965 and its Amendments," in Leonard W. Levy and Kenneth L. Karst, eds., Supplement II, Encyclopedia of the American Constitution, 2d. ed. (2000) 2813-14.
- "Race and Voting," in Leonard W. Levy and Kenneth L. Karst, eds., Supplement II, Encyclopedia of the American Constitution, 2d. ed. (2000) 2093-94.
- "White Gerrymandering of Black Voters: A Response to Professor Everett," North Carolina Law Review 79 (2001), 1333-43.
- "Renewing the Non-permanent Features of the Voting Rights Act," Focus Magazine, July-August 2006, 1-14.
- "The Historical Context of Voter Photo ID Laws," PS: Political Science and Politics 42 (January 2009), 93-96.

THESIS AND DISSERTATION COMMITTEES:

- 1971 James Cogan, "An Essay on Phenomenological Ontology: On Description and Analysis." Ph.D. Dissertation in Philosophy, Anthony Palmer, Director.
- 1971 Julie Roy Jeffrey, "Education for Children of the Poor: A Study of the Origins and Implementation of the Elementary and Secondary Education Act of 1965." Ph.D. Dissertation in History, Allen Matusow, Director.
- 1972 Fernando Rodriguez Casas, "Substance and Referring." M.A. Thesis in Philosophy, James Street Fulton, Director.
- 1973 Barbara Thompson Day, "The Oil and Gas Industry in Texas Politics, 1920-1935." Ph.D. Dissertation in History, Allen Matusow, Director.
- 1973 Ronald Schlundt, "Civil Rights Policies in the Eisenhower Years." Ph.D. Dissertation in History, Allen Matusow, Director.
- 1975 Patricia Goudreau, "Investigation of Sex Differences Across Job Levels." Ph.D. Dissertation in Psychology, William C. Howell, Director.
- 1975 Kenneth Mladenka, "Distribution of Urban Public Services." Ph.D. Dissertation in Political Science, Robert H. Dix, Director.
- 1975 Rudi Volti, "Agricultural Development and Organizational Changes: Agro-Technical Extension Services in the People's Republic of China." Ph.D. Dissertation in Behavioral Science, Chandler Davidson, Director.
- 1976 Michael Freney, "The Political Element in Military Expertise." Ph.D. Dissertation in Political Science, John Ambler, Director.
- 1976 Louis J. Marchiafava, "Institutional and Legal Aspects of the Growth of Professional Urban Police Service: The Houston Experience." Ph.D. Dissertation in History, Harold Hyman, Director.
- 1978 Cheryl Walker Casey, "From Myth to Reality: A Study of the Theme of Rebirth in the Tragedies of Aimé Césaire." Ph.D. Dissertation in French, Maurice Lecuyer, Director.
- 1981 Robert Eubank, "Incumbency, Partisanship and Salience Effects in Congressional Elections, 1956-1978." Ph.D. Dissertation in Political Science, David Brady, Director.
- 1983 Luis Ricardo Fraga, "Nonpartisan Slating Groups: The Role of Reformed Parties In Substate Policy Making." Ph.D. Dissertation in Political Science, David Brady, Director.
- 1986 Douglas J. Brems, "Risk Perception for Common Consumer Products." Ph.D. Dissertation in Psychology, Kenneth Laughery, Director.
- 1988 Morgan Slusher, "Differential Impact of Causal and Statistical Evidence in Counteracting Belief Perseverance: Changing Beliefs about Acquired Immune Deficiency Syndrome." Ph.D. Dissertation in Psychology, Craig Anderson, Director.
- 1989 Peter Cobin, "Linguistic Subsystems of a Chicano Child." Ph.D. Dissertation in Linguistics, Sidney Lamb, Director.
- 1991 Kerri D. Gantz, "On the Basis of Merit Alone: Integration, Tuition, Rice University, and the Charter Change Trial, 1963-1966." M. A. Thesis in History, John Boles, Director.

- 1991 Albert L. Ellis, III, "The Regressive Era : Progressive Era Tax Reform and the National Tax Association : Roots of the Modern American tax structure." Ph.D. in Political Science, Robert Stein, Director.
- 1992 James D. Schmidt, "Neither Slavery nor Involuntary Servitude: Free Labor and American Law, 1815-1880." Ph.D. Dissertation in History, Harold M. Hyman, Director.
- 1992 Charles Zelden, "Justice Lies in the District: A History of the U.S. District Court, Southern District of Texas, 1902-1960." Ph.D. Dissertation in History, Harold Hyman, Director.
- 1993 Leslie Lovett, "The Jaybird-Woodpecker War: Reconstruction and Redemption in Forty Bend County, 1865-90." M.A. Thesis in History, Harold Hyman, Director.
- 1994 Nicholas George Malavis, "Bless the Pure and Humble: Texas Lawyers and Oil Regulation, 1919-1936." Ph.D. Dissertation in History, Harold M. Hyman, Director.
- 1994 Barbara Jane Rozek, "Words of Enticement: The Effort to Attract Immigrants to Texas, 1865-1914." Ph.D. Dissertation in History, John Boles, Director.
- 1996 Loreta Kovacic, "The Piano Music of Boris Papandopulo." M.A. Thesis in Music, Walter Bayle, Director.
- 1996 Sam Watson, "Professionalism, Social Attitudes, and Civil-Military Accountability in the United States Army Officer Corps, 1815-1846." Ph. D. Dissertation in History, Ira Gruber, Director.
- 1997 Bruce Anderson, "Electoral Competition and Party Complexity: A Dynamic Model of Minority Party Success and Legislative Organization in Transforming State House Chambers." Ph.D. Dissertation in Political Science, Keith Hamm, Director.
- 1997 Ellen Renee Read, "The Effects of Social Security Reforms on Health, Leisure, and Consumption Decisions." Ph.D. Dissertation in Economics, Robin Sickles, Director.
- 1998 Maria Anderson, "Private Choices vs. Public Voices: The History of Planned Parenthood in Houston." Ph.D. Dissertation in History, Harold Hyman, Director.
- 1998 Philip D. Dillard, "The Confederate Debate Over Arming the Slaves." Ph.D. Dissertation in History, John Boles, Director.
- 1999 Jonathan W. Singer, "Broken Trusts: The Texas Attorney General Versus the Oil Industry, 1889-1909." Ph.D. dissertation in History, Harold Hyman, Director.
- 2000 Melissa Kean, "At a Most Uncomfortable Speed: The Desegregation of the South's Private Universities, 1945-1964." Ph.D. dissertation in History, John Boles, Director.
- 2001 Robert S. Shelton, "Waterfront Workers of Galveston, 1838-1920." Ph.D. dissertation in History, John Boles, Director.
- 2002 Richard Engstrom, ""Electoral District Structure and Political Behavior." Ph.D. dissertation in Political Science, John Alford, Director.
- 2003 Stacey Ulbig, "Subnational Contextual Influences on Political Trust." Ph.D. dissertation in Political Science, John Alford, Director.

- 2004 Elaine Thompson, "Southern Small Towns: Society, Politics, and Race Relations in Clinton, Louisiana." Ph.D. dissertation in History, John Boles, Director.
- 2005 Janet Malek, "The Decision to Conceive and the Concept of Harm: A Defense of a Child-Centered Ethical Appeal." Ph.D. Dissertation in Philosophy, George Sher, Director.
- 2006 Scott P. Marler, "Merchants and the Political Economy of Nineteenth-Century Louisiana: New Orleans and Its Hinterlands." Ph.D. dissertation in History, John Boles, Director.
- 2010 Wesley Phelps, "The War on Poverty in Houston," Ph.D. dissertation in History, Allen Matusow, Director.

SENIOR HONORS THESES DIRECTED:

- 1969 Nancy Dietz, "The Developmental Psychology of Jean Piaget and Its Implications for the Field of Mental Retardation."
- 1983 Meredith Gibbs, "Admissions Policies at Rice University."
- 1990 Victoria Soto, "Poor Women's Experience with Prenatal Care in Houston, Texas."
- 1993 Elizabeth Lock, "The Texas At-Large System and Possibilities for Multiracial Coalition Formation."
- 1996 Mary Elizabeth Stearns, "Business-Elementary School Partnerships in the Houston Independent School District."
- 1996 Carolyn Chi, "Students' Views on the Racial Climate at Rice University."
- 1998 Felisa Sanchez, "Ethnic Composition of Congressional Districts and Hispanic Candidates' Electoral Success."
- 1999 Elisheva Budabin McQuown, "Believing, Achieving, and Succeeding: An Experimental Language Arts Program."
- 1999 Claudia Gee, "Factors Influencing Occupational Prestige."
- 2001 Kelly Bolen, "Juvenile Probation in Harris County: A Case Study."
- 2002 Lori Hellkamp, "After Affirmative Action: Percent Plans?" (Rice Undergraduate Scholars Program).
- 2005 Caitlin Rosenthal. "Beyond the Bake Sale: Assessing the Social and Economic Capital of Parent-Teacher Organizations" (Political Science Senior Honors Thesis).

UNIVERSITY SERVICE

Standing Committees:

- University Welfare Committee, 1970-71
- Library Committee, 1971-75 (Chair, 1973-75)
- Affirmative Action Committee, 1971-74, 1992-93
- Education Council, 1977-86
- Committee on Teaching, 1977-80, 1996-97, 1999-2000 (chair)
- Admissions Committee, 1981-89, 1993-96 (chair)
- Parking Committee, 1991-93
- Faculty Council, 2002-03

Promotion and Tenure Committee, 2002-03
University Council, 2002-03

Other Committees:

Minority Student Recruitment Committee, 1968-72
Sloan Grant Committee, 1972-75
Danforth Fellowship Committee, 1974-75
Rice Task Force on Substance Abuse (Chair), 1987-88
Search Committee, Director, Office of Minority Affairs (Chair), 1987-88
Personnel Grievance Committee, 1988-89
Committee of Inquiry into Sexual Harassment Charges (Chair), 1991
Search Committee, Vice President for Student Affairs, 1993-94
President's Ad Hoc Committee on Athletic Admissions, 1994
President's Ad Hoc Committee on Minority Concerns, 1994-2003
Sallyport Board of Advisors, 1994-98
Search Committee, Dean of Social Sciences, 1995-96
President's Ad Hoc Committee on Faculty Dismissal Policy (Chair), 1997
Search Committee, Richardson Senior Fellow in Public Policy, Baker Institute, Rice University, 1998-99
Search Committee, Medical Sociology Joint Appointment, Rice University and University of Texas School of Public Health (Chair), 1998-2002
Search Committee, Sociology faculty replacements (Chair), 1998-2000
President's Ad Hoc Planning Committee for the Center for Teaching and Curricular Innovation, 1999-2000
President's "KTRU Friendly" Committee, 2001-03
Ad Hoc Committee on Status of Rice Thresher, 2002-03
President's Ad Hoc Committee on Gays, Lesbians, Bi-sexuals, and the Transgendered, 2002-03
Committee on the Rice Undergraduate Program (Chair), 2005-06
Rice Benefits Committee, 2009-11
Rice Veterans Affairs Committee 2011-
President's Ad Hoc Committee on Phased Retirement 2011

Residential College Associateships

Jones College, 1967-76
Baker College, 1982-87

Faculty Sponsorships of Student Groups

Rice Democratic Caucus, 1977-86
Rice Young Democrats, 1987-94; 2003-
Rice TexPIRG (Texas Public Interest Research Group), 1979-83
Rice Gay-Lesbian Support Group, 1979-88
Rice GALOR, 1989-95
Rice PRIDE, 1995-2003
Rice Black Students Union, 1987-93
Rice Black Student Association, 1993-

Rice Fellows, 1999-2001
 NAACP, Rice Chapter, 2001-03

Residential College Courses Taught

"Violence" (Jones College), 1968
 "The Social Conditioning of Interpersonal Relations" (Jones College), 1969
 "The University" (Jones College), 1969
 "Electoral Politics" (with Prof. George Antunes), 1972
 "Money and Politics in Texas" (Will Rice College), 1976
 "Houston Beyond the Hedges" (Baker College), 1981

Selected Miscellaneous University Service

Rice Summer Honors Program in the Social Sciences, 1970
 Coordinator, Jones College Freshman Tutorial Project, 1970-72
 Sponsor, "Ugly Artifacts Exhibition," Rice Memorial Center, 1971
 Speaker, "Rice and the Houston Black Community," Rice Alumni Homecoming Weekend, 1971
 Participant, "Max Weber in the Social Sciences," History Department Graduate Colloquium, 1974
 Teacher (with others), Interdisciplinary Sloan Grant Courses, 1975
 Lecturer, Education Council-sponsored in-service teaching training, 1977
 Teacher (with Profs. Thomas Haskell and Martin Weiner), "The New Shape of Work," NEH-funded interdisciplinary course, 1978
 Organizer, "Texas Democratic Party, 1936-1988" Oral History and Personal Paper Archives, Woodson Center, 1978-1988
 Organizer, Interdisciplinary Study Group on Social Theory, 1980
 Moderator, faculty panel discussion on U.S. foreign policy in El Salvador, sponsored by Rice Democratic Caucus, 1981
 Speaker, Sid Richardson College Forum, 1982
 Moderator, faculty panel discussion on Soviet foreign policy, sponsored by Rice Democratic Caucus and Rice TexPIRG, 1983
 Co-founder, Walter and Helen Hall Annual Lecture Series, 1983-present
 Chair, Minority-Group Subcommittee of Admissions Committee, 1986-89
 Originator and Co-coordinator, The Rice Urban Lecture Series, 1992-93
 Co-sponsor and moderator, Public Symposium on The Bell Curve, 1995
 Moderator, Debate on Affirmative Action, sponsored by ADVANCE, 1996
 Coordinator, "A Celebration of the Life of Barbara Jordan," public memorial tribute to Barbara Jordan sponsored by the Department of Sociology, 1996
 Moderator, "Diversity at Rice," Student Association Annual Retreat, 1996
 Moderator, Debate on Immigration, sponsored by ADVANCE, 1996
 Co-organizer and participant, campus-wide meeting on sexism at Rice, 1996
 Speaker, "Race and Rice," panel on the situation of minority students at Rice on the first anniversary of the Hopwood decision, Rice University, 1997

Judge, Phi Beta Kappa teaching award, Rice University, 1998-03
 Judge, Hudspeth Awards Committee, 2000
 Chair, Phi Beta Kappa teaching award committee, Rice University. 2001-02
 Faculty chair, United Way Fund Drive, Rice University 2001-02
 Keynote speaker, campus-wide 9/11 anniversary remembrance service, Rice University, 2002
 Moderator, "Homophobia at Rice," forum sponsored by ADVANCE on Rice University campus, 2002
 Panelist, "Reverse Discrimination or Equal Opportunity?: Discussing Affirmative Action," forum sponsored by ADVANCE, Rice University , 2003

SELECTED COMMUNITY SERVICE:

Presentations

"The Feasibility of Biracial Voting Coalitions," Citizens for Good Schools, Houston, 1967
 "The Social Responsibilities of Business," Southwestern Bell College-Business Socioeconomic Seminar, Austin, 1969
 "The Military-Industrial Complex," Rice University, Vietnam Moratorium Day, 1969
 "Institutional Racism," annual regional meeting of YWCA directors, Houston, 1971
 "Race, Class and Politics in Texas," South Park Civic Club, Houston, 1974
 "Women and other Minorities at Rice," Society of Rice University Women, 1975
 "Measuring the Effects of the 'Second Reconstruction,' " Rice Bicentennial Public Lecture Series, 1976
 "Texas Political Parties," lecture in a series on Texas politics, sponsored by the Breakthrough Foundation, Houston, 1978
 "The Effects of Single-member Districts on Houston City Elections," presented at various times to the Harris County Council of Organizations, Jones Memorial Methodist Church, Jewish Community Center Public Affairs Forum and The Metropolitan Organization, 1979
 "Race and the 1984 Presidential Election," Rice Alumni Lecture Series, 1984
 "Recent Houston Politics," public lecture given to the Cross-cultural Development Organization, Houston, 1985
 "The City and Its People. The Ethnic Groups Who Shaped Houston's Population," Rice Continuing Studies Lecture Series, "The Way We Were: A History of Houston," 1993.
 "Trends in Rice Undergraduate Admissions," Board of Trustees, Rice University, 1995.
 "The Rise of Racial Gerrymandering in Houston," First Unitarian-Universalist Church, Lecture Series on Houston, 1996.
 "The Struggle for Black Political Equality in Texas," ninth-grade history class, Stafford High School, Stafford, Texas, 1997.

- "The Rise of the Meritocracy?" Rice Lecture Series Featuring Teaching Award Winners, 1998.
- "The Idea of Equality in the Paintings of Norman Rockwell," Rice Lecture Series Featuring Teaching Award Winners, 1999.
- "Teaching Across the Millennia: A Rice Professor Reminisces," Society for Rice University Women, January 2000; also given to Rice Alumni, Vienna, Austria, August 2000.
- "Redistricting: The Blood Sport of Politics," Rice Lecture Series Featuring Teaching Award Winners, 2000.
- "Is Equality in America a Chimera?" Rice Lecture Series Featuring Teaching Award Winners, 2002; also given as part Continuing Studies Lecture Series Featuring Sociology Department, 2003.

SELECTED PROFESSIONAL ACTIVITIES:

- "An Introduction to Sociology," ten-week seminar for resident psychiatrists, The University of Texas Medical Branch, Galveston, 1971.
- Invited response to two papers, Southern Historical Association annual meeting, Atlanta, 1974.
- "Roundtable on Peace Education: Regional Experiences and Resources," Southwestern Social Science Association annual meeting, San Antonio, 1975.
- "The Culture of Poverty and the Culture of Wealth," paper, Southwestern Social Science Association annual meeting, Dallas, 1976.
- Charter member, Board of Directors, Houston Metropolitan Research Center, Houston Public Library, 1977.
- "The Influence of Money on Elections: The Texas Case," jointly authored paper, Southwestern Social Science Association annual meetings, Dallas, 1977.
- "The Struggle for Control of the Democratic Party in Texas," paper, Eastern Sociological Association annual meeting, New York City, 1976.
- "The Mobilization of Bias in Houston City Politics," co-authored paper, Southwestern Social Science Association annual meeting, Houston, 1978.
- "The Political Economy of Contemporary Public Policy," Symposium participant, Department of Government, The University of Texas at Austin, 1978.
- Invited response to two papers, Southern Historical Association annual meeting, Atlanta, 1979.
- "Increasing Opportunities for Political Participation," invited panelist, Texas Advisory Committee to the U.S. Commission on Civil Rights, San Antonio, 1979.
- "A Model of Contemporary Houston Politics," paper, Social Sciences Faculty, Houston Community College, 1980.
- "At-Large Elections and Minority-Group Representation," co-authored paper, Texas Southern University Conference on Afro-American Studies, Houston, 1981.
- "At-Large Election Systems and the Dilution of the Black Vote: Historians as Expert Witnesses," panelist, Social Science History Association annual meeting, Nashville, 1981.

- "Minority Politics and Political Cultures," panelist, Southwestern Social Science Association annual meeting, San Antonio, 1982.
- "Continuity and Change in a Sunbelt City: Perspectives on Houston and Survey Research in the 1980s," panel chair, Southeastern Sociological Association Annual Meetings, Houston, 1983.
- "The Social Scientist as Expert Witness," panelist, Southwestern Political Science Association annual meetings, Houston, 1983.
- "Minority Vote Dilution," panel chair, Southern Political Science Association Annual Meeting, Birmingham, 1983.
- "Power, Influence, and Public Policy in Houston," panelist, Southwestern Political Science Association annual meeting, Houston, 1985.
- "Nonpartisan Slating Groups and Minority Representation," paper, American Political Science Association annual meeting, New Orleans, 1985.
- "Partisans in Sheep's Clothing: The Ambiguous Legacy of Municipal Reform," Rice University Provost's Lecture Series, 1985.
- "The Impact of the Voting Rights Act of 1965," co-organizer (with Bernard Grofman) planning conference, Rice University, 1988.
- "Municipal and Special District Elections," panelist, Southwestern Political Science Association annual meetings, 1988.
- "V. O. Key's Vision of Texas Politics," presentation, symposium on "The World of Texas Politics," sponsored by The Houston Post and the LBJ School of Public Affairs, Houston, 1988.
- "Texas Politics," invited panelist, Lee College Symposium on "Texas Politics in Transition," Baytown, 1988.
- "Race and Class in Texas Politics," paper, Conference on Social Class, University of Kansas, 1989.
- "Race and Class in Texas Politics," paper, American Sociological Association, San Francisco, 1989.
- "The Impact of the Voting Rights Act," panel chair, American Political Science Association, Atlanta, 1989.
- "The Voting and Campaign Process," panel moderator, Symposium on Democracy in the 1990s: Voting in the United States, Lyndon Baines Johnson School of Public Affairs, Austin, 1990.
- "The Voting Rights Act and the Transformation of Urban Politics," panel chair, Western Political Science Association, Seattle, March 1991.
- "What is Election Discrimination? Argument and Proof in Voting Rights Cases," panelist, American Association of Black Political Scientists annual meeting, Houston, March 1992.
- "Recent Controversies over The Voting Rights Act," invited lecture, Seminar on Voting Rights, University of San Francisco School of Law, San Francisco, March 1992.
- "1990s Redistricting," panelist, Western Political Science Association annual meeting, San Francisco, March 1992.
- "Regulating the Electoral Process," invited panelist, Texas Law Review Symposium, University of Texas Law School, Austin, Texas, 1992.

- "The Impact of the Voting Rights Act in the South: The First Twenty-five Years," invited panelist, Southern Regional Council Voting Rights Conference, Atlanta, 1993.
- "Voting Rights After Shaw v. Reno," invited panelist, American Political Science Association annual meeting, New York City, 1994.
- "Response to Gary Orfield," invited panelist on "Educational Policy," Conference on the Impact of the Civil Rights Act of 1964, National Judicial Center, Washington, D.C., 1994.
- "Diversity and Democracy: Creating the Common Good," invited paper, 75th Anniversary of the Southern Regional Council, Atlanta, 1994.
- "The Voting Rights Act: The Accomplishments." Panel moderator, Conference on the Voting Rights Act, Thurgood Marshall School of Law, Texas Southern University, 1995.
- "Voting Rights in the Wake of Recent Supreme Court Decisions," panel moderator, American Political Science Association annual meeting, Chicago, 1995.
- "The Media and the Quiet Revolution: Public Opinion and Voting Rights," invited paper, Conference on "The Voting Rights After Thirty Years," co-sponsored by the Southern Regional Council and the Lawyers Committee for Civil Rights Under Law, New Orleans, 1995.
- "Mechanisms of Ethnic/Racial Conflict Resolution," invited panelist, "E Pluribus Unum" conference, Stanford University, 1996.
- "Tenth Anniversary Roundtable on Voting Rights Issues," invited panelist, The Citadel Symposium on Southern Politics, Charleston, March 7-8, 1996.
- "The Rise of Racial Gerrymandering in Texas," invited public lecture, Lamar University, Beaumont, March 25, 1997.
- "Contemporary Districting Challenges and Opportunities," invited panelist, conference on "Geographic Information Systems and Political Redistricting," National Center for Geographic Information and Analysis, SUNY at Buffalo, Oct. 26, 1997.
- "Perspectives on the 2000 Redistricting," invited panelist, Joint Center for Political and Economic Studies, Washington, D.C. , July 9, 1998.
- "Author Meets Critics," invited panelist responding to Morgan Kousser's Color Blind Injustice, Southern Sociological Society, Nashville, April 9, 1999.
- "Race and Redistricting," invited paper, Conference on "African Americans: Research and Policy Perspectives at the Turn of the Century," Stanford University, November 11-13, 1999.
- "And Then You Are Sued: Examining the Role of the U.S. Department of Justice and the Federal Courts in the Fifth Wave of Redistricting Since the Passage of the Voting Rights Act," invited chair, Conference on "Power Shift: Redrawing America's Political Boundaries After the 2000 Elections and Census," University of Houston Center for Public Policy, December 8, 2000.
- "White Gerrymandering of Black Voters: A Response to Professor Everett," invited paper, "Democracy in a New America: A Symposium," sponsored by the University of North Carolina Law Review, Chapel Hill, February 2001.

- "Urban Disfranchisement," invited organizer and chair, plenary session of American Sociological Association annual meeting, Anaheim, California, August 20, 2001.
- "Author Meets Critics: S.M. Lipset and Gary Marks's Why There is No Socialism in the United States," organizer of panel, American Sociological Association annual meeting, Anaheim, California, August 18-21, 2001.
- "The Future of the Voting Rights Act," invited participant, conference at Columbia University, September 20-21, 2003.
- "Protecting Democracy: Defining the Research Agenda for the 2007 Voting Rights Act Reauthorization," invited participant, Harvard Civil Rights Project, Harvard University, May 9-12, 2004.
- "Protecting Our Voices: The Significance of the Voting Rights Act," invited participant, Mexican American Legal Defense Fund, the Lawyers Committee for Civil Rights Under Law, and the NAACP Legal Defense Fund, Washington, D.C., June 17-18, 2004.
- "One Nation with Many Voices," invited participant, conference on the Voting Rights Act and minority language provisions, Arizona State University, Phoenix, April 6, 2005.
- "Lessons From the Past, Prospects for the Future: Honoring the 40th Anniversary of the Voting Rights Act of 1965," invited panelist, Yale University, April 21-23, 2005.
- "Past and Prologue," invited panelist, National Conference Commemorating the 40th Anniversary of the Voting Rights Act of 1965" (Sponsored by the Lawyers Committee for Civil Rights, LDF, MALDEF, ACLU, and Native American Rights Fund), July 25-26, 2005, Washington, D.C.
- "Documenting Discrimination in Voting: Judicial Findings Under Section 2 of the Voting Rights Act since 1982," invited panelist, The Voting Rights Initiative, University of Michigan Law School, November 10, 2005.
- "Conference on the Voting Rights Act," invited panelist, Duke University, April 7-8, 2006.
- "Research on Minority Vote Suppression," convener, unofficial colloquium in conjunction with the annual meeting of the American Political Science Association, Philadelphia, August 31, 2006.
- "Democracy, Disenfranchisement, and November 2008," invited panelist, Rice University, September 24, 2008.
- "Shaking the Foundations," invited panelist, conference, Stanford Law School, October 3-4, 2008.
- "A Brief History of Vote Suppression in America from the Civil Rights Movement to the Present," invited lecture, American Constitution Society, Houston Lawyers Chapter, October 28, 2008.
- "Vote Suppression," invited lecture, Community Census and Redistricting Institute, Southern Coalition for Social Justice, Duke University, July 29, 2010.

CONSULTING AND EXPERT TESTIMONY IN LAW SUITS:

- 1971 Sparks v. Griffin, U.S. District Court, Marshall, Texas. Expert witness for plaintiffs, black school teachers who were fired when Upshur Independent School District was required to desegregate.

- 1973-74 USA v. Griggs, U.S. District Court, Gainesville, Florida. Consultant to defendants in their efforts to demonstrate that the jury selection procedure in Florida was unfair.

- 1973-74 Sabala v. Western Gillette, Inc. and Ramirez v. Western Gillette, Inc., U.S. District Court, Houston, Texas (Case Nos. 71-H-961 and 71-H-1336). Consultant to plaintiffs in class-action employment discrimination suit.

- 1975-76 Greater Houston Civic Council v. Mann, U.S. District Court, Houston (Case No. 73-H-1650). Expert witness for plaintiffs, who alleged minority vote dilution as a result of the City of Houston's at-large election system.

- 1978 Three-judge panel, U.S. District Court, Houston. Expert witness for plaintiffs-intervenors attempting to enjoin the City of Houston from holding elections until it complied with Section 5 pre-clearance requirements of the Voting Rights Act.

- 1979-80 Whitfield v. City of Taylor, Texas U.S. District Court, Austin, Texas (Case No. A-79-CA-0015). Consultant to plaintiffs, who alleged unconstitutional dilution of their votes.

- 1979-83 Jones v. City of Lubbock, Texas, U.S. Court of Appeals, Fifth Circuit, Unit A (No. 79-2744). Consultant and expert witness for plaintiffs-appellants, who alleged unconstitutional dilution of their votes.

- 1979-86 Velasquez v. City of Abilene, Texas, U.S. District Court, Abilene (Case No. CA-1-80-57). Consultant and expert witness for plaintiffs, who alleged unconstitutional dilution of their votes.

- 1980 City of Port Arthur, Texas v. United States of America, U.S. District Court for the District of Columbia (Case No. 80-064P). Expert witness for USA, who contended that a consolidation election by the city illegally diluted the votes of minorities under the Voting Rights Act.

- 1980-81 Oxford Place Welfare Rights Organization v. Jerome Chapman, U.S. District Court, Houston (Case No. 79-H-1283). Consultant to plaintiffs, welfare recipients who alleged that long delays in receipt of their welfare payments were unconstitutional.

- 1981 At the request of the Legal Aid Society of Central Texas, analyzed voting data for the City of Austin, Texas, relevant to a preclearance submission the city made to the Justice Department under the Voting Rights Act.
- 1981 Brown v. Board of School Commissioners of Mobile County, U.S. District Court, Mobile, Alabama (Case No. CV-75-298-P). Expert witness for USA, intervenors in the rehearing of a vote-dilution suit, remanded by the U.S. Supreme Court.
- 1981 Bolden v. City of Mobile, U.S. District Court, Mobile, Alabama (Case No. 75-297-P). Expert witness for plaintiffs in the rehearing of a vote-dilution case, remanded by the U.S. Supreme Court.
- 1981 Walton v. Henson, U.S. District Court, Paris, Texas (Case No. P-80-39-CA). Expert witness for plaintiffs, who alleged unconstitutional dilution of their votes.
- 1981 Seaman v. Upham. Three-judge panel, U.S. District Court, Austin, Texas (Case No. P-81-49-CA). Expert witness for plaintiffs, who alleged unconstitutional dilution of their votes.
- 1982 Texas v. Martin, 104th District Court of Taylor County, Texas. Consultant to defendant, Dee Dee Martin, indicted on capital murder charges, who claimed the jury selection system discriminated against blacks.
- 1982 Harris v. City of Hopewell, Virginia, U.S. District Court, Richmond, Virginia (Case No. 82-0036-R). Consultant to plaintiffs, who claimed unconstitutional dilution of their votes.
- 1983-84 Kirksey v. Danks, Mayor of Jackson, Mississippi, U.S. District Court, Jackson (Civil Action No. J83-0077-C). Expert witness for plaintiffs, who claimed dilution of their votes under Section 2 of the Voting Rights Act.
- 1985 Sumbry v. Russell County, Alabama. Consultant to plaintiffs, who claimed dilution of their voting strength under Section 2 of the Voting Rights Act.
- 1985 Lee County Branch of the NAACP v. City of Opelika, Alabama, (Case No. 83-7275). Consultant to plaintiffs, who claimed dilution of their voting strength under Section 2 of the Voting Rights Act.
- 1985 Tallahassee NAACP v. Leon County, Florida. Consultant to plaintiffs alleging dilution of their votes in county commission elections.

- 1985 Harris v. Graddick, U.S. District Court, Birmingham (C.A. No. 84-T-595-N). Expert witness for plaintiffs alleging that the state of Alabama employed a system for appointing poll officials that denied blacks equal access to the political process.
- 1985-86 LULAC v. Midland Independent School District, U.S. District Court, Midland, Texas (MO-85-CA-001). Expert witness for plaintiffs alleging vote dilution.
- 1985-86 United States of America v. Dallas County (Alabama) Commission, U.S. District Court, Selma (C.A. No. 78-578-H). Expert witness for U.S.A. in case alleging the dilution of minority votes in Dallas County.
- 1986-87 Martin v. Allain, Governor of Mississippi, U.S. District Court, Jackson (C.A. No. J84-0708 (W)). Expert witness for plaintiffs alleging vote dilution.
- 1985-87 McNeil v. City of Springfield, U.S. District Court, Springfield, IL. (C.A. No. 85-2365). Expert witness for plaintiffs alleging minority vote dilution.
- 1987 Martin v. Allain (see above) consolidated with Kirksey v. Allain, U.S. District Court, Jackson (C.A. No. J85-0960 (W)). Expert witness for plaintiffs, alleging violation of their voting rights under the Constitution and the Voting Rights Act.
- 1987 Metropolitan Pittsburgh Crusade for Votes v. City of Pittsburgh (C.A. No. 86-173). Consultant to plaintiffs alleging vote dilution.
- 1988-89 Badillo v. City of Stockton, California (C.A. No. 87-1726, U. S. District Court, Eastern District of California). Consultant to plaintiffs alleging vote dilution.
- 1988-89 Russell Yarbrough v. City of Birmingham, Alabama (C.A. No. CV87-PT-1947-S). Consultant to defendants, a racially-mixed city council elected at large in a system white plaintiffs claimed diluted their votes.
- 1988-89 League of United Latin American Citizens (LULAC) v. Clements, U.S. District Court, Western District of Texas (No. 88-CA-154). Consultant to plaintiffs alleging vote dilution in multi-member district state judicial elections.
- 1994 Vera v. Richards, U.S. District Court, Southern District of Texas (C.A. No. H-94-0227). Expert for State of Texas, which was alleged to have violated the U.S. Constitution in creating majority-minority districts in the 1990s round of congressional redistricting.

2009 Democratic National Committee *et al.*, v. Republican National Committee *et al.*, Civil Action No. 81-3876 (DRD), U.S. District Court: District of New Jersey. Expert for the DNC, who argued that a consent decree requiring the RNC to obtain permission from Federal Judge Dickinson Debevoise before engaging in any ballot security program should not be vacated, as requested by the RNC.

9/2/2014

2:13-cv-00193

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs,

v.

RICK PERRY, *et al.*,

Defendants.

Civil Action No. 2:13-cv-193 (NGR)
(Consolidated Action)

Supplemental Declaration of Dr. Chandler Davidson

Pursuant to 28 U.S.C. § 1746, I, Chandler Davidson, make the following declaration:

1. Attorneys for the U.S. Department of Justice have asked me to conduct research on a bill enacted in 2011 by the Texas legislature, Senate Bill 14 (SB 14). I was asked to provide information that would assist the Court in determining whether the bill was adopted with a racially discriminatory purpose.¹ This supplemental report has three purposes: 1) to revise the reference in my initial report summarizing the findings of Professor Stephen Ansolabehere in this case to reflect the changes made in his analysis once the state of Texas corrected in late July what I understand to have been invalid data provided to the United States; 2) to supplement the evidence in my report by incorporating information obtained

¹ At present there are diverse terms used in common discourse and the media to refer to racial and ethnic membership in the U.S. I shall use the term *ethnic minority* to refer both to racial and ethnic minority populations in Texas. These are primarily African Americans, Asian Americans, and Hispanic Americans, although there are of course ethnic subcategories of each. These minorities are distinct from Anglos, *i.e.*, Whites of non-Hispanic heritage. I shall also use different terms to refer to specific groups, *e.g.*, *African Americans* and *Blacks*; *Latinos*, *Hispanics*, and *Spanish-surnamed persons*; and *Whites* and *Anglos*.

by the United States since the date of my initial report in this case; and 3) to correct a small number of typographical and other minor errors in my initial report. The paragraphs containing revisions are as follows: 1, 3, 10, 16, 21-23, 27, 30, 39-41, 49, 52, 54, 57, 60-61, 70, and 72. The footnotes containing revisions are as follows: 19, 29-30, 47, 53, 58, 64, 68, 76, 93, 98-99, 110, 127, 129, 132-33, 142, and 148-50.

2. I am a professor emeritus of sociology and political science at Rice University. My *curriculum vitae* is attached. I received a B.A. degree from the University of Texas and a Ph.D. degree from Princeton. My academic research has focused on race and politics, particularly in Texas. I have received research grants from the National Science Foundation and The National Endowment for the Humanities, among others. In 1995, the Legislative Studies Section of the American Political Science Association named a book that I co-edited, *Quiet Revolution in the South: The Impact of the Voting Rights Act, 1965-1990*,² winner of its annual prize for the best book in legislative studies published the previous year. It is a collection of essays, including one that I authored, on the impact of the Voting Rights Act of 1965 (hereafter “VRA”). Another of my edited volumes, *Minority Vote Dilution*,³ was later named to the Howard University Press Classic Editions Library Series in 2004. Another co-edited volume to which I contributed, *Controversies in Minority Voting: The Voting Rights Act in Perspective*, is well-known among voting rights scholars.⁴ Since

² Chandler Davidson and Bernard Grofman (eds.), *Quiet Revolution in the South: The Impact of the Voting Rights Act, 1965-1990* (Princeton, N.J.: Princeton Univ. Press, 1994).

³ Chandler Davidson (ed.), *Minority Vote Dilution* (Washington, D.C.: Howard Univ. Press, 1984).

⁴ Bernard Grofman and Chandler Davidson (eds.), *Controversies in Minority Voting: The Voting Rights Act in Perspective* (Washington, D.C.: The Brookings Institution, 1992).

retiring from teaching in 2003, I have been invited to testify on voting issues before the Texas Senate meeting as a whole, as well as before U.S. Senate and House committees. In the course of my career, I have testified as an expert or served as a consultant in over thirty lawsuits in nine states, mostly on behalf of plaintiffs in voting rights cases. In this case, I am being compensated for my work at my standard rate of \$350 per hour.

3. In this report, my primary focus is on Texas' adoption of SB 14 in 2011, and efforts to adopt a photo identification requirement for voting, beginning in 2005. In the context of SB 14's origins and passage, I have examined the bill's historical provenance, the political context of the decision-making process, arguments by proponents and opponents, the sequence of events leading to its passage, and the anticipated impact of the new law from the viewpoint of legislators and other government officials involved in the adoption and implementation of SB 14. These factors are the sort of evidence most social scientists consider when assessing the decisions of a legislative body, as I have in my prior scholarly writing. In describing the conflicts over photo ID bills in the four legislative sessions leading to passage of SB 14, I examine the stated intentions of supporters of SB 14, and the claim by SB 14's opponents that it was intended to place a heavier burden at polling sites on registered Blacks and Latinos than on Anglos. In order to put those events in perspective, I place the legislative efforts in the years 2005 through 2011 in the context of the history of discrimination affecting voting in Texas, which has been the subject of significant parts of my scholarly writing for the past four decades.

Executive Summary

4. The history of Texas politics from statehood to 1965 is one of perpetual discrimination targeting and affecting the state's two largest ethnic minority groups:

Latinos and Blacks. The poll tax, the white primary, laws restricting voter registration to a brief time period, acts of brutality and lethal violence, efforts to intimidate minorities at the polls, misinformation given to minorities about the election process, and minority vote dilution through racial gerrymandering and the imposition of at-large elections, *inter alia*, have depressed the Black and Latino vote throughout Texas' existence as a state.

Minorities and their leaders and allies have fought continuously for more than a century to destroy these barriers to voting, and the VRA, including Texas' coverage by Section 5 from 1975 to 2013, strengthened minorities' ability to vote without hindrance and elect their candidates of choice. Ethnic minority leaders' most notable recent efforts regarding discriminatory election laws consisted of a high-profile battle over four legislative sessions to prevent a photo ID requirement at the polling place, a battle they lost in 2011, resulting in passage of SB 14. Although a three-judge court in the District of Columbia found SB 14 to violate Section 5 of the VRA,⁵ it nonetheless became enforceable in June 2013 after the United States Supreme Court decided *Shelby County v. Holder*,⁶ which in effect rendered Section 5 inoperative.

5. The claims of lawmakers and top state government officials—almost all of whom were white—favoring SB 14 and its predecessors in 2005, 2007, and 2009—were, first, that there was significant vote fraud in Texas of the kind a photo ID law would prevent and, second, when the first claim was shown to be highly dubious, that such a law would reassure the public that election results were correct. Opponents argued that the law was not necessary, given the extremely small amount of fraud of the kind the law would

⁵ *Texas v. Holder*, 888 F. Supp 2d 113 (D.D.C. 2012), *vacated*, 133 S. Ct. 2886 (2013).

⁶ 133 S. Ct. 2612 (2013).

prevent, *i.e.*, voter impersonation at the polls; that despite the political debate about suspected fraud there was little evidence of public concern about the integrity of the electoral process in Texas; that the likely effect of such a law would be to place a heavier burden on Blacks and Hispanics who do not have one of the required photo IDs—compared with Anglos—given that the two minority groups are disproportionately poor; and that the goal of a strict photo ID requirement was to skew elections in favor of Anglos, who vote overwhelmingly Republican. After considering the history of racial politics in Texas generally and SB 14 in particular, I conclude the evidence undermines the stated purposes of the state’s photo identification requirement for voting and better fits the claims of the bill’s opponents that a) its intent was to discriminate disproportionately against minority voters, and b) that bill supporters knew, and intended, the significant burdens the law would disproportionately impose on ethnic minorities compared to the Anglo majority.

The Background of Voter Identification Bills in Texas, 2005-2011

6. Between 2005 and the final adoption of SB 14 in 2011, the Texas legislature considered a series of increasingly restrictive voter identification bills, including photo ID requirements, but—until 2011—allowed non-photo alternatives. Texas was aware that other states had begun enacting similar photo ID laws and still more were considering them. During these years the proponents of restrictive photo ID requirements gained legislative seats. The transformative 2010 election provided the key to final passage of SB 14. Looming over the legislative debates over voter ID laws, however, was the changing demography of Texas.

7. In 2000, 52.4% of the state’s population was Anglo; Hispanics were 32%; and African Americans were 11.3%. By 2010, however, Anglos made up only 45.3% of the

state's population; Hispanics were now 37.6%; and African Americans constituted 11.8% of the population. Asian Americans made up another 3.8%.⁷ As early as 2005—the year a predecessor to SB 14 was first introduced—the Census Bureau announced Texas had become a minority-majority state, a widely publicized fact the state comptroller highlighted on her website.⁸ According to the Census figures, in Harris County (Houston), the state's most populous, Hispanics for the first time outnumbered Anglos.⁹ General awareness of the state's changing demography was routinely discussed in the legislature, beginning as early as 2005.¹⁰ As I shall explain later, this context parallels earlier contexts in Texas' political history where increased potential participation by ethnic minorities triggered restrictive responses about which a consensus now exists that there was purposeful discrimination.

The First Photo ID Bill: 2005

8. When the legislative battle over adopting a photo identification requirement began in 2005, the partisan makeup in the Senate was 19 Republicans and 12 Democrats; and in the house, 86 Republicans and 63 Democrats. This meant that under the rules in the Senate, opponents of photo ID requirements—virtually all of them Democrats—had the ability to block any photo ID bill. The photo ID bill, House Bill 1706, was filed by Elections

⁷ U.S. Census Bureau, *American Fact Finder*. "Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data, Texas," U.S. Census 2010.

⁸ <http://www.window.state.tx.us/specialrpt/tif/population.html>.

⁹ Staff, "The new California—Latest U.S. census figures on the Hispanic population herald major change and challenges for Texas," *Houston Chronicle*, Aug. 13, 2007.

¹⁰ See, e.g., comments of Rep. Debbie Riddle, Texas House Elections Committee, Hearing on HB 516, at 1:36-1:37 (responding to Rep Anchia's comments about Latino population trends) (Feb. 16, 2005), http://tlchouse.granicus.com/MediaPlayer.php?view_id=23&clip_id=6139.

Committee Chair Mary Denny, a conservative representing a heavily white district. The law then current, passed in 1997, required only that voters at the polls show their voter registration card, a card issued by the state without charge.¹¹ It had no photo on it. It could easily be carried in a billfold or purse, like a driver license. To obtain this card, a Texan filed a voter registration application with the county elections registrar. The application included the voter's name, address, date of birth, and a sworn affirmation of U.S. citizenship, among other information. When the application was approved, the registrar would mail the "voter registration certificate" to the applicant. If a voter did not bring the card to the polls on election day, an election official would ask for other documents, some with photos, others without, such as a current or expired driver license from any state, a passport, a utility bill, or a bank statement, among others—a total of eight.¹²

9. House proponents decided to enact a more stringent set of requirements. (At that point, 29% of the House consisted of Blacks, Latinos, and Asian Americans.) The stated rationale behind HB 1706 was fraud prevention.¹³ HB 1706 would have required a voter at

¹¹ Tex. Elec. Code § 13.142(a).

¹² Tex. Elec. Code § 13.142(a). Specifically, acceptable forms of identification for voting included 1) a driver license or personal identification card issued by the Department of Public Safety or a similar document issued to the person by an agency of another state, regardless of whether the license or card had expired; 2) a form of identification containing the person's photograph that established the person's identity; 3) a birth certificate or other document confirming birth that was admissible in a court of law and established the person's identity; 4) United States citizenship papers issued to the person; 5) a United States passport issued to the person; 6) official mail addressed to the person by name from a governmental entity; 7) a copy of a current utility bill, bank statement, government check, paycheck, or other government document that showed the name and address of the voter; or 8) any other form of identification prescribed by the secretary of state.

¹³ Guillermo X. Garcia, "Interest groups oppose voter identification bill," *San Antonio Express-News*, Apr. 19, 2005.

the polling place to show a voter registration certificate and either one form of specified photo identification or two forms of specified non-photo identification. If the voter's name was on the precinct list of registered voters or if he was eligible under other provisions, and if his identity could have been verified from the identification presented, he would have been allowed to vote without a registration certificate.¹⁴

10. In hearings before the House Elections Committee, opponents claimed the proposed requirement would have a discriminatory effect on a number of groups, including rural residents, the elderly, and ethnic minorities. One of the bill's authors responded that the proposed law would "simply force you to prove that you are who you say you are." The executive director of Common Cause-Texas responded: "Where is the fraud? Where is the problem that [the bills] are attempting to address? I believe this will have a real chilling effect" on efforts to promote greater turnout.¹⁵ Rep. Ruth Jones McClendon, a veteran African-American legislator from San Antonio, also raised a key demographic issue: "The state is rapidly becoming more Hispanic, African-American and Asian, and we're becoming younger and more mobile," she claimed. "We should make it easier for all citizens to vote,

¹⁴ House Research Organization: Texas House of Representatives, *Focus Report: Major Issues of the Texas House of Representatives*, "H.B. 1706: Requiring voters to present proof of identification at polling places," Nov. 9, 2009, at 50; for the bill's text, see <http://www.capitol.state.tx.us/Search/DocViewer.aspx?ID=79RHB017063B&QueryText=%22HB+1706%22&DocType=B>; <http://www.hro.house.state.tx.us/focus/major79.pdf>.

¹⁵ Guillermo X. Garcia, "GOP wants to make voters prove themselves," *San Antonio Express-News*, Mar. 18, 2005.

not harder.”¹⁶ This particular point/counterpoint would be heard often during the following three sessions.¹⁷

11. As the bill moved forward, Rep. Rafael Anchia, who would become one of the chief opponents of photo ID bills in future sessions, asserted, “We did not hear one shred of evidence that there is voter fraud in this state. If this was a court of law, this case would be thrown out for lack of evidence.” African-American Rep. Garnett Coleman noted that if the bill passed, voters who appeared at the polls only with the then-current required document—a registration card—would have to cast a provisional ballot and then within five days go to the county registrar’s office with proof of their identity, if their ballot was to be counted.¹⁸

12. HB 1706 was passed in the House 78-67 in early May over the opposition of every Black legislator and all but one Latino legislator.¹⁹ But it faced problems in the Senate. Under a long-standing arrangement known as “the two-thirds rule” in that body, a bill cannot be considered on the floor out of the regular order of business unless two-thirds of those present in the 31-member body are present and approve.²⁰ The rule has been

¹⁶ Guillermo X. Garcia, “Voter ID measure gets House nod,” *San Antonio Express-News*, May 3, 2005.

¹⁷ For a summary account of the issues dividing the parties regarding HB 1706, see House Research Organization: Texas House of Representatives, *op. cit.*, at 50-51.

¹⁸ R.G. Ratcliffe, “Multiple ID voting bill wins preliminary OK—House foes say additional proofs meant to keep some groups away from ballots,” *Houston Chronicle*, May 3, 2005.

¹⁹ HJ 2005, at 2554-55, JA 8900-02 (*Texas v. Holder*), USA_00023782-84.

²⁰ The two-thirds rule has been in effect since the 1950s. See Stuart Long, “With 11 Senators For You, Kill any Bill You Want to,” *Temple Telegram*, Jan. 22, 1956. For a brief description of the rule, see William Earl Maxwell, Ernest Crain, Adolfo Santos, *Texas Politics Today: 2009-2010 Edition* 202 (Boston: Wadsworth 2010); see also K. Davis Dep. 57:11-59:16 (*Texas v. Holder*).

justified since its adoption in the middle of the Twentieth Century as fostering comity in the Senate. Eleven senators vowed to prevent the bill's consideration by the full Senate.²¹ To overcome this barrier, the House then appended the provisions of HB 1706 to a Senate bill concerning another aspect of elections.²² This move enabled the bill's proponents to evade the two-thirds rule through the use of yet another rule, which allows the Senate to debate a bill if its author accepts amendments added in the House, provided a majority of the Senate so votes.²³ Sen. Rodney Ellis, an African American, then vowed to defeat the bill in the Senate chamber through a filibuster, but he faced a formidable difficulty. Senate rules require members to stay on the floor while speaking, not even to leave for a quick trip to the restroom, and to remain standing throughout the filibuster. On the appointed day he appeared early in the morning, letting it be known he was wearing a catheter and indicating he would stay as long as necessary. Fortunately for Sen. Ellis, Senate Minority Leader Leticia Van de Putte, a Latina, successfully challenged the Senate's right to debate the bill, invoking the state constitution.²⁴ That the two leaders of this countermovement represented two of the state's districts with the largest black and Hispanic populations did not go unnoticed.

13. Supporters of the bill tried one more maneuver: sending it to the House-Senate conference committee. However, the session was almost over, and several important bills

²¹ Karen Brooks, "Voter ID proposal revived—House plan, added to Senate bill, may avoid Democratic blockade," *Dallas Morning News*, May 25, 2005.

²² Karen Brooks, *ibid.*

²³ Staff, "House would make voters show IDs," *Austin Am.-Statesman*, May 25, 2005.

²⁴ Associated Press, "Democrats derail voter-ID bill with threat of filibuster, exercise of Senate rules," *Lubbock Avalanche-Journal* May 29, 2005; Guillermo X. Garcia, "Voter identification bill may be dead for session," *San Antonio Express-News*, May 29, 2005.

were still in process of being finalized. The session ended before further action on voter ID could be taken, given the rules governing the order in which bills could be considered.²⁵ As one journalist put it, the bill “died peacefully in the Senate.”²⁶ Despite its death, proponents’ hopes of passing a similar bill were very much alive when the next session convened.

The Battle Continues: 2007

14. In January 2006, Attorney General Greg Abbott announced on his website that he was launching a statewide initiative “to combat and prevent the persistent problem of voter fraud . . . triggered by a dramatic increase in indictments for voter fraud.” He characterized such fraud as “an epidemic.”²⁷ Given this assertion, readers might have expected the website to tally or at least mention several instances of successfully prosecuted vote fraud. Such was not the case, either at the time of this first announcement or at any point leading up to passage of SB 14 more than five years later. Instead, Abbott, after inveighing against Texas’ having “turned a blind eye to this fraud,” and reiterating that “voter fraud is occurring on a large scale when viewed statewide,” announced that he had obtained four sets of indictments against individuals for voter fraud in Texas since 2005. The four sets of indictments were against eight people, only two of whom had at that point been found guilty, according to his same message. Neither had engaged in voter

²⁵ Clay Robinson, R.G. Ratcliffe, “As clock ticks, tax bill seems doomed,” *Houston Chronicle*, May 29, 2005; Kristen Mack, “The Legislature—Session’s close crammed with action—Filibuster threat and phone calls fill lawmaker’s time,” *Houston Chronicle*, May 30, 2005.

²⁶ Paul Burka, “Manic Suppression,” *Texas Monthly*, Apr. 2009
<http://www.texasmonthly.com/story/manic-suppression>.

²⁷ “Attorney General Abbott Launches Training Initiative To Identify, Prosecute, Prevent Voter Fraud,” <https://www.texasattorneygeneral.gov/oagnews/release.php?id=1423>.

impersonation at a polling site, which is the kind of fraud a photo ID requirement might plausibly prevent.²⁸

15. Abbott's announcement described the ambitious hunt for voter fraud his office would be undertaking. A new Special Investigations Unit (SIU) was being established, with a \$1.5 million grant from Gov. Rick Perry's office. (The full amount was subsequently not used.) The SIU would primarily help local law enforcement and prosecutors identify, investigate, and prosecute various types of voter fraud offenses. The SIU's activities, however, were not to be undertaken statewide, but instead, in only 44 of Texas' 254 counties which, taken together, contained most of the state's Blacks and Latinos.²⁹ There was no indication as to why these counties rather than others were chosen.

16. As quickly became clear, a major focus of the 2007 legislative session would again be a photo ID bill—HB 218—even though its proponents' margin in the House was smaller than in 2005. Three bills addressing the issue were soon filed. HB 218, the bill that advanced, was authored by Representative Betty Brown, who represented an East Texas district whose voting age population was nearly 80% white. Her bill was intended to prevent in-person voter fraud and voting by non-U.S. citizens. Rep. Brown's bill would have required a voter at the polls to present a valid voter registration certificate and either one form of photo identification or two forms of non-photo identification. It would have changed the list of proof of identification, specifying eight acceptable forms of photo ID and eleven

²⁸ One was a county commissioner who had collected mail-in ballots while he was a candidate running for office. The other was a woman who had mailed an absentee ballot in the name of her dead mother. *Ibid.*

²⁹ *Ibid.* These counties included El Paso, Harris, Bexar, Dallas, and Tarrant, among others, where a large percentage of the state's minority population resided.

forms of non-photo ID.³⁰ Rep. Brown justified her bill as preventing non-citizens from voting.³¹ However, since a photo ID bill was first introduced in 2005, no evidence of convictions of non-citizen voting had been brought to the legislature's attention.³² More important, one form of ID—a Texas driver license—could be obtained by non-citizens. Other supporters of HB 218 justified it as establishing a “uniform standard” for voting at the polls, reducing voter fraud generally, and “restoring confidence” in elections. (Of course, there was already a uniform standard—a voter registration certificate.) The bill's proponents also argued, from 2005 through the 2011 session, that so many everyday events, whether cashing checks or traveling by plane or renting a movie at Blockbuster, require a photo ID that it was unreasonable to believe many people lacked it.³³

17. HB 218 was immediately attacked by opponents, including those representing majority-minority districts, as well as on newspaper opinion pages. In the words of an editorial in the *Fort Worth Star-Telegram*:

An insidious scheme to turn back the clock on voting rights in Texas tragically has once again made its way to the state House floor. The architects of this idea, pitched as a noble effort to prevent voter fraud, cannot be allowed to succeed with what is surely one of the greatest assaults on the right to vote in this state since passage of the federal Voting Rights Act in 1965.³⁴

³⁰ [Texas] House Research Organization, *Focus Report: Major Issues of the 80th Legislature, Regular Session*, July 17, 2007, <http://www.hro.house.state.tx.us/focus/major80.pdf>; Williams, 36:16-37:9, July 29, 2014. Staff, “Ballot barriers—Legislation requiring Texas voters to present extensive identification would create far more problems than it would solve,” *Houston Chronicle*, Apr. 26, 2007.

³¹ Joint Appendix 7396-97, 7583 (*Texas v. Holder*), USA_0022278-79, USA_00022465.

³² Joint Appendix 1507 (*Texas v. Holder*), USA_00016389; T. Williams Dep. 148:25-150:4 (*Texas v. Holder*); Straus Dep. 100:12-101:1 (*Texas v. Holder*).

³³ Joint Appendix 2160 (*Texas v. Holder*), USA_00017042.

³⁴ Editorial, “A poll tax?” *Fort Worth Star-Telegram*, Apr. 23, 2007.

18. Rep. Anchia pointed out that the bill only addressed voter impersonation and cited testimony from Abbott's office that no case of voter impersonation at the polls in Texas had ever been prosecuted.³⁵

19. Royal Masset, former political director of the Texas Republican Party, agreed that among Republicans it was "an article of religious faith that voter fraud is causing us to lose elections."³⁶ Yet Massett strongly opposed photo ID bills. In an article on the subject he wrote, "Anyone who says all legal voters under this bill can vote doesn't know what he is talking about. And anyone who says a lack of IDs won't discriminate against otherwise legal minority voters is lying."³⁷

20. All eleven opposing senators, ten of whom represented Black or Latino districts, signed a letter advising Lt. Gov. Dewhurst, presiding over the Senate, that they would vote against any procedural motion to debate voter ID legislation.³⁸ Given the two-thirds rule, that would just be sufficient to kill the bill. Sen. Mario Gallegos was scheduled to receive a liver transplant in a Houston hospital. It was possible that he would not be able to return

³⁵ Karen Brooks, "House OKs voter ID bill—Legislature: License or nonphoto alternatives would be required," *Dallas Morning News*, Apr. 24, 2007; R.G. Ratcliffe, "Voting Requirements—House passes photo ID bill—GOP says it will hinder fraud; Democrats see harm to black, Hispanic turnout," *Houston Chronicle*, Apr. 24, 2007.

³⁶ *Ibid.*

³⁷ Royal Masset, "The Voter ID Bill Will Kill My Mother's Right to Vote," *The Quorum Report*, Apr. 23, 2007, http://quorumreport.com/rd/rd_masset.cfm; <http://blog.chron.com/texaspolitics/2007/04/a-republican-his-mother-and-voter-id/>.

³⁸ Clay Robison, "Disarming visitors at the Capitol," *Houston Chronicle*, Apr. 23, 2007.

for the rest of the session.³⁹ In Gallegos' absence, there would be only ten opponents of the bill in the 31-member Senate.⁴⁰

21. As the session moved forward, many of the same debates surfaced over the need for a photo ID bill as in 2005. Dewhurst, for example, asserted that "with eight to 12 million illegal aliens currently living in the U.S., the basic American principle of one person, one vote, is in danger," although he did not cite any evidence of non-citizens participating in U.S. elections or attempting to do so.⁴¹ Dewhurst was echoing the House bill's sponsor, Rep. Betty Brown, who had said the previous month that it was "designed to keep illegal aliens, non-citizens and other people otherwise not qualified" from voting.⁴² There was still no evidence in the legislative record—then or in later sessions—that non-citizens had voted.⁴³ Moreover, a Texas driver license could legally be obtained by a non-citizen. The House passed the bill by a vote of 76 to 69 in April, once more virtually along party lines and over the opposition of all Black members and nearly all Latino members.

22. In spite of his doctor's orders to stay in Houston—a biopsy having revealed that he was rejecting his new liver—Sen. Gallegos returned to the capital and vowed to stay there

³⁹ Mark Lisher, "Senate, used to solidarity, repairs split," *Austin Am.-Statesman*, May 18, 2007.

⁴⁰ However, Gallegos asked Lt. Gov. Dewhurst to give him a 24-hour warning if an ID bill were brought up. Dewhurst agreed. Kristin Mack, "Gallegos tells state Senate he needs new liver," *Houston Chronicle*, Jan. 12, 2007.

⁴¹ *Austin Am.-Statesman* blog, "Letter from Lt. Gov. on voter ID bill," May 16, 2007.

⁴² W. Gardner Selby, "House Republicans squeak through voter ID mandate—Senate chances uncertain, pitting Dewhurst against Democrats," *Austin Am.-Statesman*, Apr. 24, 2007.

⁴³ T. Williams Dep. 148:25-150:4 (*Texas v. Holder*).

to block the bill.⁴⁴ Gallegos was not the only senator with health problems. In May, Sen. Carlos Uresti, representing a majority-Latino district in west Texas, was in bed with severe flu and had given notice to the Secretary of State that he would be absent. Seeing an opportunity, Sen. Troy Fraser, the Senate sponsor of HB 218, successfully moved to put aside the two-thirds rule and suspend the order of business so that HB 218 could be voted on. Apprised of the fact in an urgent phone call from a fellow Latino senator, Sen. Uresti rushed to the Capitol, but the vote occurred before he reached the Senate chambers. Sen. Eliot Shapleigh, however, convinced Lt. Gov. Dewhurst, presiding over the Senate, to verify the vote. Sen. Uresti “sprinted up the Capitol steps to reach the chamber just seconds before his name was called,” and, as Sen. Gallegos (still in the chamber) had before him, prevented passage of the bill.⁴⁵ This time opponents were able to prevail despite the change in the temporary suspension of the two-thirds rule. The session ended without HB 218 coming up for a vote.

The Battle Continues: 2009

23. In the summer before the 2009 session began, more than two years after Attorney General Abbott had announced his intentions to prosecute perpetrators of the vote-fraud

⁴⁴ A senator who was a physician ordered a hospital bed for Gallegos in a capitol office. Mark Lisher, “Ill senator settles in for voter ID fight,” *Austin Am.-Statesman*, May 22, 2007.

⁴⁵ Uresti Dep. 62:1-21, 59:25-60:7 (*Texas v. Holder*); Def.’s Trial Ex. 413 at 1 (*Texas v. Holder*); Joint Appendix 8297 (*Texas v. Holder*), USA_00023178; Uresti Dep. 63:16-64:3 (*Texas v. Holder*); Def.’s Trial Ex. 283 ¶¶ 6-9 (*Texas v. Holder*); Def.’s Trial Ex. 413 at 1 (*Texas v. Holder*); Joint Appendix 8313 (*Texas v. Holder*), USA_00023195; Joint Appendix 8307-08 (*Texas v. Holder*), USA_00023189-90; Uresti Dep. 64:4-67:6 (*Texas v. Holder*); Joint Appendix 8315 (*Texas v. Holder*), USA_00023197; Def.’s Trial Ex. 413 at 1 (*Texas v. Holder*); Def.’s Trial Ex. 283 at 2 (*Texas v. Holder*); Gary Scharrer, “Flu-stricken Uresti rushes in to vote,” *San Antonio Express-News*, May 16, 2007.

“epidemic,” he announced the findings of his labors. He reported that he had “prosecuted” 26 cases, two of which involved voter impersonation, but he did not say the two cases had led to a conviction. And, although another case was characterized as “non-citizen registration,” the perpetrator was not in fact a non-citizen trying to register but a candidate for local office convicted of lying to non-citizens about their eligibility to register to vote.⁴⁶

24. Abbott’s report in no way dampened proponents’ enthusiasm for a new ID law. Lt. Gov. Dewhurst pledged a renewed push. He ran a series of ads stressing the need to stop “non-citizens” from voting, even though the legislative record contained no evidence that non-citizens had been convicted of voting in person illegally.⁴⁷ Indeed, Speaker Straus later testified in deposition that he was not aware of any documented cases of non-citizens voting in the state.⁴⁸

25. Shortly before the 2009 session began, Lt. Gov. Dewhurst announced he was reaching out to Democratic senators—including Sen. Gallegos—about possible compromises regarding a new bill.⁴⁹ On the second day of the session, however, the Texas

⁴⁶ Wayne Slater, “BALLOT-BOX SCRUTINY—AG Fails to uncover major voting fraud—Abbot saw epidemic, but prosecuted only 26 cases—all Dems,” *Dallas Morning News*, May 18, 2008.

⁴⁷ Ross Ramsey, “The Cure for Record Turnout,” *Texas Weekly*, Mar. 31, 2008; T. Williams Dep. 148:25-150:4 (*Texas v. Holder*). Legislators received numerous emails from constituents linking the requirement of a photo id to eliminated voting by “illegal aliens.” See for example Gary Bogan to Sen. Glenn Hegar, March 14, 2009: “I strongly urge you to support . . . the passage of legislation to require all Texas voters to present photo identification when voting.” Sen. Hegar saw this bill as a way to prevent “the high likelihood of voter fraud by illegal immigrants.” LEG00000477. Robert Bilbo to Rep. Tom Craddick, May 22, 2009: “Please talk to your West Texas colleagues and tell them that we in West Texas are sick of voter fraud from illegal Mexicans.” LEG00043530.

⁴⁸ Straus Dep. 100:12-101:1 (*Texas v. Holder*).

⁴⁹ Clay Robinson, “Republicans revive voter ID proposal,” *Houston Chronicle*, Dec. 15, 2008.

Senate “adopted a change in its rules that will benefit Republicans by allowing a vote on the voter ID bill,” according to a news account.⁵⁰ The upper chamber, “long known for its decorum and reluctance to publicly air its dirty laundry,” spent the day fiercely debating a measure, applying only to voter identification legislation, which would replace the two-thirds rule with a mere majority requirement.⁵¹ Sen. Tommy Williams, who chaired the Senate Administration Committee, bragged that he had “led the successful effort which allowed the Photo Voter ID bill to be brought to a vote and passed in the Texas Senate.”⁵² As Sen. Williams explained: “After thoroughly researching parliamentary procedure, we engineered the designation of Voter ID as a special order calendar item.”⁵³

26. Senator John Carona was the sole Republican to oppose the measure.⁵⁴ Although he said he favored photo ID, breaking the two-thirds rule in this case “sends a terrible message.”⁵⁵ Rep. Trey Martinez-Fischer, chair of the House Mexican American Caucus,

⁵⁰ Mike Ward, “Texas Senate adopts rules change to allow Voter ID vote,” *Austin Am.-Statesman*, Jan. 15, 2009.

⁵¹ Paul Burka, “Manic Suppression,” *Texas Monthly*, Apr. 2009; Texas Senate Rules (adopted by 81st Legislature), Jan. 14, 2009, Sen. Res. No. 14, at Rule 5.11.

⁵² Email from Sen. T. Williams to Janet Stieben, Chief of Staff for Senator T. Williams and Jason Baxter, Legislative Dir. for Sen. T. Williams, Oct. 20, 2009. TX 00202988; TX 00202990; TX 00202996; House Research Organization: Texas House of Representatives, *Legislative Staff:83rd Legislature*, Mar. 1, 2013, <http://www.hro.house.state.tx.us/staff.aspx>.

⁵³ *Ibid.*, TX_00202996. Sen. Williams later conceded that this was the most significant change in the Senate’s rules during his time in office and in his experience created “the most controversy there ever was over a rules resolution.” Williams Dep. 229:8-12, 229:24-230-2 (July 29, 2014).

⁵⁴ Mike Ward, *op. cit.*

⁵⁵ “Exception to Senate rule was a bad GOP maneuver,” *San Antonio Express-News*, Jan. 16, 2009; “Texas GOP senators gain advantage on voter ID bill” (editorial), *Fort Worth Star-Telegram*, Mar. 13, 2009.

added, “This nonissue of voter ID has the potential to melt down this chamber. Who wants to do that when we have public education and the budget, [the widespread devastation caused by] Hurricane Ike and health care [issues to address]?”⁵⁶

27. Photo ID became what news sources called the “marquee issue” in the 2009 legislative session.⁵⁷ SB 362 was introduced by Sen. Troy Fraser, who represented a district whose voting age population was 70% white. In his press release, Sen. Fraser said the bill was designed to ensure that “illegal aliens,” were not able to vote. As passed by the Senate, the bill would have required a voter to present to an election officer at the polls one form of photo ID or two forms of non-photo ID. The bill would have modified the list of acceptable proof of identification, specifying six acceptable forms of photo ID and 11 acceptable forms of non-photo ID. A voter registration certificate—previously sufficient to enable a voter to cast her ballot—would have been acceptable only as one of the two required forms of non-photo ID.⁵⁸ Sen. Van de Putte called it a “true vote-suppression

⁵⁶ Janet Elliott, Gary Scharrer, and R.G. Ratcliffe, “Senate Dems open fight on voter ID bill,” *Houston Chronicle*, Mar. 11, 2009.

⁵⁷ Gary Scharrer, “Lull before ‘Voter ID’ storm,” *San Antonio Express-News*, May 23, 2009.

⁵⁸ House Research Organization, “Revising voter identification requirements: SB 362 by Fraser,” at 58; <http://www.lrl.state.tx.us/scanned/sessionoverviews/major/major81.pdf>. Fraser Dep. 203:8-18, 206:5-12, 210:20-211:8 (July 23, 2014). Sen. Fraser agreed that SB 362 was substantially the same bill as its processor, HB 218, but he would have liked to amend the bill to add a photo ID requirement. *Ibid.*, 45:22-46:4, 49:14-50:5 (July 23, 2014).

bill.”⁵⁹ Other opponents voiced concerns about its impact on minority voters, but no investigation of the issue occurred in the legislature.⁶⁰

28. Bryan Hebert, then-deputy general counsel to Lt. Gov. Dewhurst, wrote an email to Janice McCoy, chief of staff to Sen. Fraser, that attached talking points and arguments in support of SB 362. Mr. Hebert wrote that SB 362 was a “compromise” bill that would create “less chance of disenfranchising elderly, poor, or minority voters.” Hebert later testified in deposition that he may have been contrasting SB 362 with voter ID bills that did not allow the use of non-photo ID.⁶¹ Hebert also wrote that allowing voters to present a range of IDs, as SB 362 provided, increased the likelihood of federal preclearance pursuant to Section 5 of the VRA.⁶²

29. In their public discussion of fraud, proponents tended to obscure the distinction between voter impersonation and other kinds of electoral improprieties. This was brought home by the invited expert testimony of Justin Levitt, a lawyer with the Brennan Center, who had conducted extensive research on voter fraud across the nation over a period of years.⁶³ “There have been a tiny handful of substantiated [impersonation] cases out of hundreds of millions of ballots,” he said. “Americans are struck by lightning far more

⁵⁹ Jay Root, “Partisan fight looms over ID bill,” *Chron.com* AP Texas News, Feb. 27, 2009; W. Gardner Selby, “Voter ID fights take new shape at Capitol,” *Austin Am.-Statesman*, Mar. 9, 2009;

⁶⁰ McCoy Dep. 115:6-116:15 (*Texas v. Holder*).

⁶¹ Hebert Dep. at 83:11-18, 88:14-93:3, June 17, 2014.

⁶² Email Bryan Hebert to Janice McCoy (Mar. 4, 2009), TX_00087007-14; House Research Organization: Texas House of Representatives, *Legislative Staff: 81st Legislature*, Mar. 23, 2009, <http://www.hro.house.state.tx.us/staff.aspx>.

⁶³ See, e.g., Justin Levitt, *The Truth About Vote Fraud* (New York: Brennan Center for Justice, 2007).

often.”⁶⁴ Testifying for the bill’s proponents was Indiana Secretary of State Todd Rokita, who argued that the difficulty of catching voter impersonation explained the absence of prosecutions of that crime.⁶⁵ Neither of the two other witnesses testifying in support of SB 362 could, under questioning, name an instance of documented voter impersonation in Texas.⁶⁶

30. During a meeting of the Senate Committee of the Whole, Adam Skaggs of the Brennan Center presented data collected by the Center, showing that nationally 8% of whites and 25% of Blacks lacked photo IDs. Moreover, people earning less than \$35,000 per year were twice as likely to lack them as those earning more than that amount.⁶⁷ The same figures were also produced by an attorney with the Mexican American Legal Defense and Education Fund (MALDEF) in 2011, as were new data by a political scientist who found that minority voters were significantly less likely than non-Hispanic whites to have any of several identifying documents.⁶⁸

31. The Senate Journal from March 18, 2009 includes a statement submitted by ten Senators noting that all of the Senators in the Senate during the 81st legislative session who

⁶⁴ W. Gardner Selby, “House hears testimony on voter ID bill,” *Austin Am.-Statesman*, Apr. 7, 2009.

⁶⁵ *Ibid.* For a comprehensive list of arguments for and against the bill, see [Texas] House Research Organization, “Revising voter identification requirements: SB 362 by Fraser.”

⁶⁶ Exhibit 14 to Sen. Debate, Mar. 10, 2009, Testimony of Hans A. von Spakovsky, at 143; House Comm., Apr. 6, 2009, at 128, 142-43.

⁶⁷ Sen. Debate, Mar. 10, 2009, at 417-19; TX_00001425-26 (*Texas v. Holder*).

⁶⁸ Sen. Debate, Jan. 25, 2011, at 306-07; TX_00000133 (*Texas v. Holder*). Supporters of SB 362 never investigated the concerns raised by opponents regarding the racial impact of the bill’s document requirements. Hebert Dep. 47:19-48:6 (June 27, 2014).

are ethnic minorities voted against voter identification legislation and the process related to such legislation at every opportunity they received in that session.⁶⁹

32. Beginning on March 10, the Senate held a 23-hour hearing on SB 362 that lasted until 6 a.m. the next morning. While this lengthy hearing ostensibly allowed the public to testify, most people left the chamber before they got a chance to testify and others waited as long as 20 hours to do so. At the end of the hearing, the Senate voted for the bill, with less than two-thirds of the Senators supporting the bill.⁷⁰ The eight Senate members who were Black or Hispanic voted against it, as well as one Anglo representing a predominantly minority district.⁷¹ They heard testimony during the hearing that of 190 cases of alleged fraud submitted to the Attorney General's office since 2002, none involved voter impersonation at the polls.⁷²

33. Hearings by the House Committee on Elections got underway in early April. The House version of the bill encountered immediate criticism.⁷³ The House that year was presided over by Rep. Joe Straus, a moderate in comparison with his predecessor, Tom Craddick. Early on he seemed eager to reach a compromise. He appointed another moderate, Rep. Todd Smith, to chair the Election Commission. "We will create an

⁶⁹ Sen. Journal, 81st Legislature, Mar. 18, 2009, USA_00013431.

⁷⁰ Sen. Journal, 81st Legislature, Mar. 18, 2009, USA_00013433-34; Terrence Stutz and Robert T. Garrett, "Texas Senate committee approves voter ID bill, will face tougher test in House," *The Dallas Morning News*, Mar. 12, 2009.

⁷¹ Def.'s Trial Ex. 566 at 9-10 (*Texas v. Holder*).

⁷² Anna M. Tinsley, "Fort Worth woman, 98, proves photo ID not always easy to get," *Fort Worth Star-Telegram*, Mar. 12, 2009.

⁷³ Terrence Stutz, "Partisan split on display at voter ID hearing in Texas legislature," *The Dallas Morning News*, Apr. 7, 2009.

atmosphere where everyone's voice can and should be heard," Rep. Smith announced.⁷⁴ In reaching out to opponents of a photo ID bill, Rep. Smith envisioned a law that would not be as strict as Indiana's—one more in tune with the Senate bill that allowed a voter without photo ID to present other kinds of identification.⁷⁵ Moreover, to give time for those without the proper photo ID to obtain it, Rep. Smith said he would be willing to delay the law's taking effect until 2013.⁷⁶

34. House opponents of the bill expressed concern that minorities were less likely to have a photo ID.⁷⁷ During consideration of SB 362, Rep. Smith estimated that roughly 700,000 Texas voters lacked a driver license.⁷⁸ He later testified in deposition that he was aware that minorities were less likely to have a photo ID.⁷⁹ He also testified that it was "a

⁷⁴ Mike Ward and Laylan Copelin, "House elects speaker; Senate in uproar—Potential rule change in upper body infuriates Democrats," *Austin Am.-Statesman*, Jan. 14, 2009.

⁷⁵ Dave Montgomery, "Hot debate over voter ID hits Texas House this week," *Fort Worth Star-Telegram*, Apr. 6, 2009.

⁷⁶ However, 71 House Republicans had signed a statement of principle indicating that any proposed ID must take effect at the "next possible uniform election date" that year, and the proposal should require voters to present only photo IDs. W. Gardner Selby, "Witnesses give varying views of voter ID bill," *Austin Am.-Statesman*, Apr. 7, 2009. Rep. Smith received constituent email complaints about his position, including charges that a photo ID requirement was necessary to prevent "illegal aliens" from voting. See, for example, Harold Davey to Smith, March 31, 2009: "You know full well that illegals vote." LEG00012418. Linda Roseland to Smith, May 7, 2009: "I am writing to express my distress over the number of illegal aliens who have breached our voting booths in Texas," adding that "I have received emails that say you are obstructing a bill on voter id that could stop this travesty of people who are not legal citizens from voting in our elections." LEG00004062.

⁷⁷ Smith Dep. 101:7-102:5, 116:21-117:28 (*Texas v. Holder*).

⁷⁸ Smith Dep. 159:5-163:7 (*Texas v. Holder*).

⁷⁹ Smith Dep. 154:1-156:20, 196:19-198:2 (*Texas v. Holder*).

matter of common sense” that the hundreds of thousands of people without a driver license would be “disproportionately poor, and therefore minority.”⁸⁰

35. After a brief hearing the House Committee on Elections reported out a version of SB 362 favored by Rep. Smith providing a fund of \$7.5 million to encourage registration.⁸¹ It was met with strong resistance among many House members favoring photo ID, who wanted it to take effect the following year, without any funding for registration efforts. Opponents of Rep. Smith’s moderate version also wanted a photo ID as the sole form of identification, foreshadowing SB 14.⁸² On the other side, African-American Rep. Mark Veasey alleged that “this is a racial issue—make no mistake about it. This is about skimming enough minority votes so some people can’t get elected.”⁸³ Unable to work out a compromise, Rep. Smith decided to move the Senate version of the bill to the full House without any changes.⁸⁴

36. Opponents of SB 362 fairly quickly decided on a strategy known as “chubbing,” a procedure used to stall legislation. To chub, legislators speak about legislation calendared for consideration prior to the bill they oppose, to delay or avoid altogether consideration of the bill they oppose.⁸⁵ While filibusters are not allowed in the House, members are

⁸⁰ Smith Dep. 164:8-16 (*Texas v. Holder*).

⁸¹ Gardner W. Selby, “Compromise on voter ID bill coolly received,” *Austin Am.-Statesman*, Apr. 30, 2009.

⁸² *Ibid.*

⁸³ Stutz, “Partisan Split,” *op. cit.*

⁸⁴ Terrence Stutz, “Voter ID bill clears Texas House committee,” *Dallas Morning News*, May 12, 2009.

⁸⁵ Texas Tribune, “*Texplainer: What is Chubbing?*,” Feb. 2, 2011, available at <http://www.texastribune.org/2011/02/02/teplainer-what-is-chubbing/>.

allowed a maximum of ten minutes to speak on bills, unless the majority gives them more time. Proponents of SB 362 were in the majority, however. Opponents could speak their ten minutes in favor of any bill they favored, and one after another did so, over five days, running down the clock and preventing over 200 bills from being passed. The session ended June 1, 2009.⁸⁶ It was unclear if a special session would be called. Only the governor can call a special session, and Gov. Perry vacillated. Near the end of June, he ordered the session to be held but, contrary to the wishes of fellow proponents of voter ID, did not place voter ID on the agenda, apparently fearful that it could create equally contentious problems in that session as well.⁸⁷ The observation of a news reporter near the end of 2009 summed up the session vividly: “Voter ID was a stick of dynamite with a five-month fuse . . . lit [by proponents] in January, when they changed their longstanding operating rules to prevent [opponents] from blocking a vote on the issue.”⁸⁸

The Passage of Senate Bill 14: 2011

Introduction of SB 14

37. As soon as SB 362 failed passage in May 2009, Sen. Fraser began working on a new bill—one that would eventually become SB 14 two years later. His chief of staff, Janice McCoy, worked with Bryan Hebert, then-deputy general counsel to Lt. Gov. Dewhurst, in

⁸⁶ James C. McKinley Jr., “Statehouse Journal: The Talk, and the Talk, and the Talk, of Austin,” *N.Y. Times*, May 30, 2009; Mike Ward, “Outlook bad for 200 bills in stalemate,” *Austin Am.-Statesman*, May 29, 2009.

⁸⁷ Peggy Fikac, “Calling special session, Perry wants quick action,” *Houston Chronicle*, June 26, 2009; Mike Ward, “Special session to cover 3 issues,” *Austin Am.-Statesman*, June 26, 2009.

⁸⁸ Jason Embry, “Voter ID fight took unexpected turns,” *Austin Am.-Statesman*, Nov. 13, 2009.

developing the bill.⁸⁹ He also had a great deal of help from the newly-formed Tea Party, thanks to which the November 2010 elections produced a Republican landslide of historic proportions in the Texas House. It was the largest Republican freshman class since 1876, transforming the minuscule 76/74 Republican majority in 2009 to 101/49 in 2011.⁹⁰ The Democrats lost 23 House seats, 19 of which had been occupied by Anglos. Over 80% of the remaining Democrats were Latinos or Blacks. The partisan composition of the Senate remained unchanged: 19 Republicans and 12 Democrats.

38. All Senate Democrats represented majority-minority districts. Among political observers—and legislators as well—from Election Day forward it seemed likely that a photo ID bill would soon be passed, if the two-thirds rule were again broken and the chubbing tactic could be prevented. The only question was the bill's nature. The answer shortly became clear.⁹¹

39. Two days before the session began, Rep. Debbie Riddle started a two-day wait outside the clerk's office at the Capitol in order to be the first to file both voter ID and anti-immigration bills—prefiguring the volatile linkage during the session between alleged vote fraud and Hispanic immigrants, with clear racial overtones.⁹² Her ID bill would have required in-person voters to present a photo ID or two forms of non-photo ID. Rep. Jessica

⁸⁹ Fraser Dep. 225:24-25 (*Texas v. Holder*); Brunson Dep. 63:8-14 (*Texas v. Holder*).

⁹⁰ R.G. Ratcliffe and Peggy Fikac, "Curtain to rise on a Legislature facing drama," *Houston Chronicle*, Jan. 9, 2011; *Senate Journal*, Jan. 26, 2011. <http://www.journals.senate.state.tx.us/sjrn/82r/pdf/82RSJ01-26-F.PDF#page=17>.

⁹¹ Sen. Van de Putte admitted "the outcome [of SB 14] is inevitable" on January 26, 2011. Press release, <http://www.vandeputte.senate.state.tx.us/pr11/p012611a.htm>.

⁹² Erin Mulvaney and Christy Hoppe, "First bills reflect GOP's new clout," *Dallas Morning News*, Nov. 9, 2010.

Farrar countered that the problem could be resolved simply by putting the voters' photo on their voter registration card, which at that point was the primary form of ID required.⁹³ Moreover, legislative testimony indicated that mail-in ballot fraud—which SB 14 did not address—was the most common election crime in the state.⁹⁴ Even a supporter of SB 14, testifying at a hearing before the House Select Committee, asserted that “voter impersonation is a minuscule problem.”⁹⁵ Indeed, legislative testimony indicated that mail-in ballot fraud was the most common election crime in the state,⁹⁶ and even it was exceptionally rare.

40. In December Rep. Todd Smith, who in 2009 had been a moderate on the ID issue, introduced an even more demanding bill than Rep. Riddle's. “The feedback we got from our local party representatives and from the grass roots is that their preference is for a hard photo ID,” said Rep. Smith. “They were not comfortable with the concept of non-photo alternatives unless it was necessary as a political compromise.”⁹⁷ Both Rep. Riddle and Rep. Smith also filed other bills dealing with immigration issues.⁹⁸

⁹³ Gary Scharrar, “Immigration, voter ID bills filed,” *San Antonio Express-News*, Nov. 9, 2010. Rep. Riddle later testified that one of her concerns in filing this bill was that illegal immigrants would attempt to vote in Texas elections and the photo id requirement was a means of detecting such attempts. Riddle Dep. 99:15-100:2, 163:11-21 (June 18, 2014).

⁹⁴ Joint Appendix 3154-55, 3174-78 (*Texas v. Holder*), USA_0018036-37, USA_00018056-60; Davis Depo. 39:16-41:8, 45:4-45: 15 (*Texas v. Holder*).

⁹⁵ Joint Appendix 1504 (*Texas v. Holder*), USA_00016386.

⁹⁶ Joint Appendix 3154-55, 3174-78 (*Texas v. Holder*), USA_0018036-37, USA_0018056-60; Davis Dep. 39:16-41:8, 45:4-45:15 (*Texas v. Holder*).

⁹⁷ Dave Montgomery, “Republicans confident of passing Texas voter ID bill,” *Fort Worth Star-Telegram*, Dec. 18, 2010; Gary Scharrar, “Immigration . . .,” *op. cit.*

⁹⁸ Robin Foster, “2011 Legislature 82nd session starts Jan. 11: Conservatives focus on illegal immigration, education system,” *Houston Chronicle*, Jan. 6, 2011. Rep. Smith continued to

41. Nine photo ID bills were introduced in the Senate. The one adopted was Sen. Fraser's. It was originally introduced as SB 178, but Sen. Fraser re-filed the bill at the request of Lt. Gov. Dewhurst, in order to receive a lower number that Dewhurst reserved for legislative priorities.⁹⁹ It thus became SB 14. In terms of allowable forms of ID, SB 14 went far beyond bills favored by photo ID proponents in the previous three sessions. The bill as filed required all in-person voters to present a photo ID at the polling place, with almost no exceptions for able-bodied voters of any age. Five, and only five, forms of photo ID were allowed:

- Current Texas driver license issued by the Texas Department of Public Safety (DPS)
- Current Texas personal identification card issued by DPS
- Current United States military identification card containing the person's photograph
- United States citizenship certificate containing the person's photograph
- Current United States passport

Senate Consideration of SB 14

42. As in 2009, the Senate once again exempted the bill, and only that bill, from its two-thirds rule, thus allowing it to be passed by a simple majority rather than by two-thirds of

get pressure from constituents. One supporter who said he had worked in Smith's first campaign and always voted for him expressed "serious reservations in the past primary because of your killing of the voter id bill which would stop current practice of illegal aliens being able to vote." Frank Kile to Smith, Nov. 23, 2010. LEG00022156. Another congratulated Rep. Smith when the photo id bill passed the House in 2011. "I wholeheartedly support this bill because no one other than Texas citizens should be voting in our election system." LEG00032354.

⁹⁹ SB 178, 82nd Legislature, Reg. Session, 2011

<http://www.legis.state.tx.us/tlodocs/82R/billtext/pdf/SB00178I.pdf#navpanes=0>. Hebert Dep. 105:23-106:11(June 27, 2014); Fraser Dep. 102:6-9, 103:5-16 (July 23, 2014).

the Senate.¹⁰⁰ Since 1981 the Senate rules have designated only two categories of legislation to be set as a special order pursuant to a majority vote: redistricting bills and voter ID bills.¹⁰¹ All senators present representing minority-majority districts voted against abrogating the traditional two-thirds rule. Sen. Eddie Lucio, representing a South Texas district, claimed breaking the rule “silences the voices of my constituents.”¹⁰² Sen. Dan Patrick wanted to abolish the two-thirds rule entirely, but was unable to do so.¹⁰³

43. The Texas Constitution prohibits passage of bills within the first 60 days of a legislative session unless a topic is designated as an emergency by the Governor. Gov. Perry did so, possibly at the request of Lt. Gov Dewhurst.¹⁰⁴ Designating the topic an emergency allowed the Senate to hold a hearing on SB 14 within the first thirty days of the session, which it did, despite protests from ethnic-minority senators that due to the bill’s expedited consideration, the senators lacked adequate time to secure and prepare witnesses for the hearing.¹⁰⁵

¹⁰⁰ Texas Sen. Rules (adopted by the 82nd Legislature), Jan 19, 2011, at Rule 5.11, Sen. Res. 36.

¹⁰¹ K. Davis Dep. 57:14-22, 59:6-17 (*Texas v. Holder*).

¹⁰² Def.’s Trial Ex 567 at 6 (*Texas v. Holder*).

¹⁰³ Abolishing the rule would become a campaign plank in his successful 2014 effort to defeat Dewhurst for the lieutenant governorship in the party primary. Gary Scharrar, “Senate moves to retain two-thirds voting rule,” *Houston Chronicle*, Jan. 20, 2011; Anna M. Tinsley, “Dewhurst, Patrick square off Wednesday in lieutenant governor’s debate,” *Fort Worth Star-Telegram*, May 3, 2014.

¹⁰⁴ Brunson Dep. 64:20-65:13 (*Texas v. Holder*).

¹⁰⁵ Armbrister Dep. 212:8-21; K. Davis Dep. 118:7-15, 178:18-179:6; Def.’s Trial Ex. 352; Joint Appendix 100-01; 140; 171 (*Texas v. Holder*); USA_00014982-83; USA_00015022; USA_00015053.

44. On January 20, 2011, the day after the Senate passed its rules, the day that the Governor designated voter identification as “emergency” legislation, Lt. Gov. Dewhurst called senators to tell them that the Committee of the Whole would take up SB 14 the following week. He said that he wanted to “move the bill as expeditiously as possible” and that the Senate would meet as long as it took to get voter ID done. He also told senators that it was in the Senate’s best interest to “complete work on voter ID” before focusing on other legislative issues.¹⁰⁶ In order to expedite consideration of SB 14, Lt. Gov. Dewhurst assigned the bill to the Senate Committee of the Whole, with Sen. Duncan presiding.¹⁰⁷

45. At least one Republican senator, Senator Estes, expressed concern that SB 14 was not compliant with the Voting Rights Act.¹⁰⁸ Shortly before the Senate’s consideration of SB 14, Bryan Hebert, then-deputy general counsel for Dewhurst, sent an email to other senate staff, including Sen. Fraser’s chief of staff, Janice McCoy, expressing skepticism about the likelihood that SB 14 would be precleared and suggesting the inclusion of additional forms of photo ID, such as those accepted in Georgia’s photo id law. “At a minimum, we might use the language used in our bill that passed [the Senate] last session: ‘a valid identification card that contains the person’s photograph and is issued by: (A) an agency or institution of the federal government; or (B) an agency, institution, or political subdivision of this

¹⁰⁶ Talking Points for DHD Call to Members, Voter ID Timeline & Procedures, TX_00034560.

¹⁰⁷ Duncan Dep 220:5-7 (*Texas v. Holder*); Rathgeber Dep. 291:19-21 (*Texas v. Holder*).

¹⁰⁸ Email from Bryan Hebert to Noe Barrios, Chief of Staff for Senator Estes, Jan. 13, 2011, (responding to Estes’ “concerns about whether Fraser’s voter ID bill complied with the Voting Rights Act”), TX_00034442; House Research Organization: Texas House of Representatives, *Legislative Staff:82nd Legislature*, Mar. 8, 2011, <http://www.hro.house.state.tx.us/staff.aspx>; Hebert Dep 108:3-109:5.

state.”¹⁰⁹ Hebert expressed concern with inflammatory issues raised by some supporters of photo ID requirements. In response to an email from another staff person attaching a memo from Texas Conservative Coalition that expressed support for SB 14 on the basis of its effect on undocumented immigrants, Hebert expressed displeasure with the message, noting, “We are not doing this to crack down on illegals but to generally strengthen the security and integrity of the voting process.”¹¹⁰

46. At the Senate hearing on SB 14, testifying in favor of it were numerous conservative citizens, perhaps the most prominent being Catherine Engelbrecht, founder of Houston-based King Street Patriots and True the Vote.¹¹¹ This organization had received publicity for its focus on Houston minority polling sites, beginning in 2010, and the office of Harris County Attorney Vince Ryan mounted an investigation of charges that True the Vote volunteers had intimidated prospective voters at these sites.¹¹²

¹⁰⁹ Email from Bryan Hebert to Jason Baxter, Legislative Dir. for Sen. T. Williams; Janice McCoy; Jonathan Stinson, Legislative Dir. for Sen. Huffman; Blaine Brunson, Chief of Staff for Lt. Gov., and Julia Rathgeber, Deputy Chief of Staff for Lt. Gov., Jan. 22, 2011, TX_00262650; House Research Organization: Texas House of Representatives, *Legislative Staff: 82nd Legislature*, Mar. 8, 2011, <http://www.hro.house.state.tx.us/staff.aspx>.

¹¹⁰ Email from Bryan Hebert to Jason Baxter, Legislative Dir. for Senator T. Williams; Amanda Montagne, Gen. Counsel for Sen. T. Williams; and Ryan LaRue, Comm. Dir. for Transp., Jan. 24, 2011, TX_00081510; House Research Organization: Texas House of Representatives, *Legislative Staff: 82nd Legislature*, Mar. 8, 2011, <http://www.hro.house.state.tx.us/staff.aspx>. See Hebert Dep. 200:12-201:16, 204:10-25:1 (June 17, 2014).

¹¹¹ A.J. Vicens and Natasha Khan, “Election observers True the Vote accused of intimidating minority voters,” Aug. 25, 2012, ABC News. http://investigations.nbcnews.com/_news/2012/08/25/13473761-election-observers-true-the-vote-accused-of-intimidating-minority-voters.

¹¹² True the Vote, “For the Record: Facts About True the Vote,” May 5, 2014; Letter from Vince Ryan, Harris County Attorney, to Catherine Engelbrecht, June 5, 2014 (letter in possession of the author).

47. And as in previous sessions, when the bill was considered during debate in the Senate's Committee of the Whole, proponents made claims that a photo ID law was needed to restore voter confidence in election results.¹¹³ However, they did not present evidence that there had been a loss of confidence among the public; indeed, national polling evidence suggested otherwise.¹¹⁴ A number of witnesses and senators expressed their concerns about the impact on minorities the bill might possibly have.¹¹⁵ But apparently the Senate leadership favored a policy of minimizing discussion of the bill's rationale. Senator Fraser repeatedly answered "I am not advised" in response to questions from bill opponents.¹¹⁶

48. During its consideration of SB 14, the Senate supporters knew that many Texans live far away from a driver license office—in some cases more than a hundred miles distant from their homes—and many offices were not open on weekends. There were no DPS offices in 81 of the state's 254 counties. And even in large counties where they existed—Harris County, for example—taking a bus to reach one and then waiting in line before returning home could take hours—sometimes as long as three hours.¹¹⁷ DPS admitted that SB 14 "could affect wait times at [DPS] offices, particularly surrounding major voting times

¹¹³ See, e.g., Transcript of Proceedings Before the Senate of the State of Texas Eighty-Second Legislature (Committee of the Whole Senate), Jan. 25, 2011, at TEX00000383, TEX00000401, TEX00000512, TEX00000513, TEX00000604.

¹¹⁴ See Stephen Ansolobehere and Nathaniel Persily, "Voter Fraud in the Eye of the Beholder: The Role of Public Opinion in the Challenge to Voter Identification Requirements," 121 *Harvard Law Review* 1737, 1751-58 (2008) (national survey).

¹¹⁵ Joint Appendix 100-01, 140, 171 (*Texas v Holder*), USA_00014982-82, USA_00015022, USA_00015053.

¹¹⁶ Joint Appendix 60 (*Texas v. Holder*), USA_00014942, Jan. 25, 2011; see also Joint Appendix 3280 (*Texas v. Holder*), USA_00018162, Mar 10, 2009.

¹¹⁷ Def.'s Trial Ex. 10; Straus Dep. 18:8-19-17 (*Texas v. Holder*). For current information about how to obtain an EIC, see <http://www.txdps.state.tx.us/driverlicense/electionid.htm>.

like a Presidential election.”¹¹⁸ Moreover, in addition to the 81 counties with no DPS offices, 34 had offices open only two days a week or less.¹¹⁹

49. During Senate debate on the bill, Sen. Mario Gallegos pointed to the difficulty that voters without necessary photo ID would have in accessing a driver license office to obtain a driver license or personal ID. He said inner-city Houston had none. Senator Carlos Uresti of San Antonio said some of his constituents in his geographically huge west Texas district would have to drive 175-200 miles round trip to obtain a driver license or personal ID.¹²⁰ Senator John Whitmire of Houston spoke of long waits—two to three hours—to obtain a driver license at the DPS there.¹²¹ Some of SB 14’s proponents acknowledged barriers, but as one added, “[W]e have done everything we can to make sure the inconvenience is mitigated. People should have to show they are who they say they are when they come to vote.”¹²²

50. Senators proposed 37 amendments to SB 14, 28 of which were tabled, and nine of which were adopted.¹²³ Some of the tabled amendments included provisions to: require evening and weekend hours at driver license offices;¹²⁴ require the Secretary of State to

¹¹⁸ Def.’s Trial Ex. 29 at 1 (*Texas v. Holder*).

¹¹⁹ Def.’s Trial Ex 361 (*Texas v. Holder*).

¹²⁰ Sen. Debate, Jan. 25, 2011, at 71-73; TX_00000074 (*Texas v Holder*).

¹²¹ Sen. Debate, Jan. 25, 2011, at 65-66; TX_00000073 (*Texas v Holder*).

¹²² Terrence Stutz, “Voter ID bill passes first vote in Senate,” *Dallas Morning News*, Jan. 26, 2011.

¹²³ Joint Appendix 1228-69 (*Texas v. Holder*), USA_00016110-51.

¹²⁴ Joint Appendix 1337 (*Texas v. Holder*), USA_00016219; Joint Appendix 1300-04 (*Texas v. Holder*), USA_00016182-86.

analyze SB 14's impact on minorities;¹²⁵ and allow additional forms of voter ID, including a Medicare ID card, a student photo ID, or a federal or state photo ID card.¹²⁶

51. When the vote for the bill occurred, no minority senators voted in favor of it, and almost all Anglo senators voted in favor.¹²⁷ After the bill passed the Senate, Bryan Hebert drafted and circulated a memo to select Senate staff summarizing the Senate-passed version of SB 14 in which he described it as "the strictest photo ID law in the country."¹²⁸

House Consideration of SB 14

52. On February 9, 2011, Speaker Straus announced a "fast track" Select Committee on Voter Identification and Voter Fraud, which was to consider one bill: SB 14. Otherwise the bill would have been assigned to the Elections Committee. Unlike the membership of a standing committee, members of the Select Committee could be hand picked by the Speaker.¹²⁹

53. In the House, two Democratic members were persuaded by Republican colleagues to switch parties, thereby precluding a repeat of an event in 2003, where Democrats had left the state *en masse*, preventing a quorum needed for a controversial mid-decade

¹²⁵ Joint Appendix 1337-39 (*Texas v. Holder*), USA_0016219-21.

¹²⁶ Joint Appendix 1246-47(*Texas v. Holder*), USA_0016128-29.

¹²⁷ Joint Appendix 1265 (*Texas v. Holder*), USA_00016147.

¹²⁸ Email from Bryan Hebert to Jonathan Stinson, Legislative Dir. for Sen. Huffman; Janice McCoy; Amanda Montagne, Gen. Counsel for Sen. T. Williams; Jennifer Fagan, Comm. Dir. for State Affairs; Ryan LaRue, Comm. Dir. for Transp. and Homeland Security; Wroe Jackson, Legislative Aide for Sen. Huffman, Jan. 27, 2011, TX_00034469-71; House Research Organization: Texas House of Representatives, *Legislative Staff:82nd Legislature*, Mar. 8, 2011, <http://www.hro.house.state.tx.us/staff.aspx>.

¹²⁹ Def.'s Trial Exs. 409, 411; Fowler Dep. 146:10-147:1; D. Davis Dep. 141:19-142:20 (*Texas v. Holder*); Straus Dep. 24:3-9 (June 23, 2014).

redistricting plan urged by then-Congressman Tom DeLay. Finally, to keep the previous session's "chub" strategy from recurring, the House majority changed the rules in this regard as well.¹³⁰ In spite of the hopelessness of their task, opponents fought back. Numerous minority legislators stressed that if it became law, it would be the most restrictive ID bill in the United States—more so than either Georgia's or Indiana's.¹³¹ The bill's opponents again pointed out that there were virtually no prosecuted cases of voter impersonation at the polls in Texas. When Rep. Rafael Anchia asked Rep. Patricia Harless, who sponsored the House bill, "Do you have any cases of voter impersonation?" she retorted, "I'm sure you know more about that than I do."¹³² As in previous sessions, supporters of the photo ID requirement ignored minority members' requests to collect information regarding minorities' possession of relevant ID documents or automobiles.¹³³

54. Opponents of SB 14 later made the point that, while the EIC was available at no cost in a limited sense (ignoring, *e.g.*, travel costs), obtaining the documents some people would

¹³⁰ Peggy Fikac, "The power of the party switch," *Houston Chronicle*, Politics Blog, Dec. 14, 2010, <http://blog.mysanantonio.com/texas-politics/2010/12/the-power-of-the-party-switch/>; Jim Vertuno, "The Senate could be Texas Democrats' 'Alamo'," *San Antonio Express-News*, Dec. 19, 2010.

¹³¹ Mike Ward, "After initial OK, Senate set to finish on voter ID," *Austin Am.-Statesman*, Jan. 26, 2011. Indeed, in its finding that SB 14 violated Section 5 of the VRA, the three-judge court in the District of Columbia called it "the most stringent [voter ID law] in the country." *Texas v. Holder*, 888 F. Supp. 2d at 144, *vacated*, 133 S. Ct. 2886 (2013).

¹³² House Debate, Mar. 21, 2011, at 18; TX_00210917 (*Texas v. Holder*). In deposition testimony Rep. Harless continued to confess lack of knowledge about features of the bill. Harless Dep. 108:20-109:13 (June 20, 2014). Although Ann McGeehan, head of the Elections Division, informed Rep. Harless that the voter registration database included almost 700,000 voters without a driver license or personal ID, Rep. Harless did not ask McGeehan to investigate the race or ethnicity of these persons, according to her chief of staff, Colby Beuck. Beuck Dep. 88:24-89:18, 92:14-95:18 (June 20, 2014).

¹³³ *See, e.g.*, House Debate, Mar. 21, 2011, at 35, TX00210934; Sen. Debate, Mar. 10, 2009, at 65-66; TX_00000073 (*Texas v. Holder*).

have to show to qualify for an EIC —such as a certified birth certificate costing \$22, or a copy of U.S. citizenship or naturalization papers, costing \$345—would be quite burdensome to many of those living in poverty. In 2011, the poverty threshold for a family of four was \$22,350, and many families, of course, were even poorer. While 12% of white Texans were below the poverty level, 29% of Blacks and 33% of Hispanics were.¹³⁴

55. South Texas voting officials complained that the bill did not address what they took to be their most serious form of voter fraud: mail-in voting. Starr County elections administrator Rafael Montalvo said the ID bill would not have much effect on fraud prevention. “Our fraud has not been on election day. It’s been through the mail-ins and to this date, that issue has not been addressed,” he said. “I don’t care how many ID laws we pass, as long as we don’t address the issue of mail-ins, we’ll have problems.”¹³⁵ As in previous sessions, bill opponents stressed that there were virtually no proven cases of voter impersonation in the state.¹³⁶ No one supporting a photo ID bill, including Attorney Gen. Abbott, presented data to the contrary. Rep. Anchia called the bill ill-timed, saying voter turnout in Texas was the worst of any state in the Union—32 percent of registered voters in the 2010 general election.¹³⁷

56. The House Select Committee on Voter Identification and Voter Fraud voted SB 14 out of committee after holding a single hearing. It was the only bill on which the committee

¹³⁴ The Henry J. Kaiser Family Found., “State Health Facts: Poverty Rate by Race/Ethnicity,” <http://kff.org/other/state-indicator/poverty-rate-by-raceethnicity/>.

¹³⁵ John McCormack, “Few S. Texas elections officials back ID plan,” *San Antonio Express-News*, Jan. 27, 2011.

¹³⁶ Terrence Stutz, “House poised to pass voter ID,” *Dallas Morning News*, Mar. 24, 2011.

¹³⁷ *Ibid.* For statistics from this election, see United States Election Project, “2010 General Election Turnout Rates,” Feb. 4, 2012, http://elections.gmu.edu/Turnout_2010G.html.

held hearings.¹³⁸ Among those testifying was a constituent of a committee member who claimed that a photo ID was necessary to prevent non-citizens from voting. Asked to present supporting facts to the committee, he responded that SB 14 would “fix the problem whether it exists or not.”¹³⁹ Just how much more restrictive the 2011 bill was than its predecessor was underlined by a reporter, noting the irony of the Senate’s leading opponent of the 2009 bill, Sen. Van de Putte, “imploing her colleagues to approve a version of the voter ID bill she and other Democrats railed against two years ago.”¹⁴⁰ The claim of proponents that SB 14 was designed, among other things, to prevent non-citizens from voting is undermined by the admission by some of the legislative leaders in the fight for the bill that they did not know whether it was possible for non-citizens to obtain a required photo ID. Indeed, the 2011 chair of the Select House Committee on Voter Identification and Voter Fraud later testified in deposition that he did not know that one of the IDs that SB 14 permitted could be legally obtained by a non-citizen. The 2009 chair of the House Elections Committee also revealed his ignorance on this score.¹⁴¹

57. Hispanic legislators were concerned that charges of non-citizens voting were used as a basis for the alleged need for a new photo ID law, both in discussions and in bills. Rep. Aaron Peña, one of the few Latino Republicans, was worried about this connection, and said at one point: “The tone of the debate is basically saying, ‘We don’t want you. . . . This is a war over our culture. These people bring diseases into our country.’” He also tried, he

¹³⁸ Def.’s Trial Ex. 410 at 6 (*Texas v. Holder*); Bonnen Dep. 44:24-45:2 (*Texas v. Holder*).

¹³⁹ Joint Appendix 1507 (*Texas v. Holder*), USA_00016389.

¹⁴⁰ Ken Herman, “Dems left longing for dreaded bill from ’09 session,” *Austin Am.-Statesman*, Jan. 31, 2011.

¹⁴¹ Bonnen Dep. 95.9-96:19 (*Texas v. Holder*); Smith Dep. 188:16-189:7 (*Texas v. Holder*).

said, while alone with his Republican colleagues to tone down the racial aspects of the debates.¹⁴² These implicit linkages between “illegal immigrants” and Latinos in general were made by some Republicans in all four sessions. Several bills introduced in 2011, including SB 14 and bills that specified English as the state’s official language,¹⁴³ were perceived as anti-Latino. Rep. Anchia believed that supporters of SB 14, in focusing on “non-citizen voting,” were actually targeting Hispanics.¹⁴⁴

58. During the House consideration of SB 14, a key amendment by bill opponents was rejected in what was in practice a closed meeting. A committee meeting that was supposed to be open to the public was held after 10 p.m., and the Capitol was always closed to the public from 10 p.m. till 7 a.m. Rep. Jessica Farrar objected, calling for the bill to be returned to the committee for a hearing the public could attend. Speaker Straus replied that because the meeting had been scheduled to begin at 9 p.m., any member of the public who had wished to attend could have remained in the building until the hearing began.¹⁴⁵ It was in this meeting the bill’s proponents struck down a proposed amendment that would have allowed college and high-school students to use their ID cards for voting.¹⁴⁶

¹⁴² Straus Dep. 95:12-18 (June 23, 2014); Wade Goodwyn, “Texas Republicans Take Harder Line On Immigration,” National Public Radio, Mar. 29, 2011. <http://www.npr.org/2011/03/29/134956690/texas-republicans-take-harder-line-on-immigration>.

¹⁴³ HB 176 by Jim Jackson; HB 301 by Leo Berman; and HB 81 by Dan Flynn.

¹⁴⁴ Anchia Dep. 59:13-19 (*Texas v Holder*).

¹⁴⁵ Terrence Stutz, “Dems say debate rules violated,” *Dallas Morning News*, Mar. 24, 2011.

¹⁴⁶ Gary Scharrer, “Voter ID clears hurdle in House,” *San Antonio Express-News*, Mar. 24, 2011.

59. Also rejected by the House were amendments that would have waived all fees for indigent persons who needed the documents to obtain an EIC; reimbursed low-income Texans for EIC-related travel costs; allowed student or Medicare ID cards as acceptable ID at the polling place; and required DPS offices to remain open in the evening and on weekends.¹⁴⁷

60. In addition to rejecting these amendments, the House also removed the exemption for voters over 70 and the provision allowing indigent voters' provisional ballots to be counted without showing photo ID. The vote on final passage of the bill in the House reflected the same pattern of racial polarization as in the Senate vote.¹⁴⁸

61. After a conference committee made significant changes in order to work out a compromise between the two houses – the most important of which was the addition of a personal identification card for voting purposes (the EIC) – the Senate reported out its final version. The House shortly thereafter approved it and Gov. Perry signed SB 14 on May 27, 2011.¹⁴⁹

SB 14 as Enacted

62. The bill as passed requires all in-person voters to present a photo ID at the polling place, with almost no exceptions for able-bodied voters of any age. Seven, and only seven, forms of photo ID are allowed:

¹⁴⁷ House Journal, Mar. 23, 2011 at 958-1029; TX_00002940-3011 (*Texas v Holder*).

¹⁴⁸ [No author], "Hits and Misses," *Dallas Morning News*, Mar. 26, 2011; Joint Appendix 2160-70 (*Texas v. Holder*), USA_00017042-52; Def.'s Trial Ex. 506 at 120C (*Texas v. Holder*).

¹⁴⁹ Hebert Dep. 238:4-9, 239:3-5, 17-249:9, 240:23-241:1 (June 27, 2014). Mr. Hebert was involved in drafting the provision adding the EIC.

- Texas driver license issued by the Texas Department of Public Safety (DPS), current or expired within 60 days
- Texas Election Identification Certificate (EIC) issued by DPS, current or expired within 60 days
- Texas personal identification card issued by DPS, current or expired within 60 days
- Texas concealed handgun license, current or expired within 60 days
- United States military identification card containing the person's photograph, current or expired within 60 days
- United States citizenship certificate or certificate of nationalization containing the person's photograph
- United States passport, current or expired within 60 days

These new requirements would supersede then-existing law, which permitted eight categories of both photo and non-photo ID.

63. Lacking one of these forms, a voter may cast a provisional ballot, but SB 14 provides that the ballot will not be counted unless, within six days, the voter goes to the voter registrar's office and presents one of the forms of acceptable photo ID. The only exceptions are for voters who swear to have a consistent religious exception to being photographed or to not have the required documents as a result of certain specified natural disasters.

64. Finally, if the voter, in advance of the election, provides the registrar with documentation from the Social Security Administration of having a disability or documentation from the Department of Veterans Affairs of having a disability rating "of at least 50 percent," she may obtain a certificate exempting her from presenting a photo ID. Among the acceptable types of ID in the final version of SB 14 is an "election identification certificate" (EIC), which, for voters under the age of 70, is valid for only six years.

65. Otherwise qualified voters without one of the other six forms of photo ID can obtain an EIC without cost at Department of Public Safety (DPS) offices, where driver licenses are obtained. However, SB 14 allowed DPS to require EIC applicants to present one of five other forms of IDs to verify U.S. citizenship, the least expensive of which was a birth

certificate obtained from a state agency, which for most voters costs \$22 to someone without a certificate but born in the state.¹⁵⁰ The most expensive—a copy of U.S. citizenship or naturalization papers—costs \$354.

66. After Gov. Perry signed SB 14 into law, Texas submitted SB 14 to the Justice Department for preclearance under Section 5 of the Voting Rights Act. While awaiting a determination from the Department, Texas filed suit in U.S. District Court for the District of Columbia for judicial preclearance of SB 14.

67. In August 2012, a three-judge court unanimously held that the state had indeed not met its burden under Section 5 of the VRA because it had not shown that SB 14 would not have a retrogressive effect on minority voters, and therefore SB 14 could not be enforced.¹⁵¹ That changed, however, in June 2013 when the U.S. Supreme Court held in *Shelby County* that Section 4 of the Voting Rights Act, which contained the coverage formula for Section 5, was unconstitutional.¹⁵² The day the decision was announced, Texas put SB 14 into effect, and prospective voters in elections thenceforward were required to meet its standards.

Likely Effect of SB 14

68. The starting point of a court's analysis of the purpose behind a legislative decision is often the likely or expected effect of the decision. Assessing the likely effect of SB 14 is the task of other experts in this case. I have, however, been provided with their findings, which I summarize here.

¹⁵⁰ Def.'s Trial Ex. 314 at 2 (*Texas v Holder*); Abshier Dep. 24:25-25:5 (*Texas v Holder*).

¹⁵¹ *Texas v. Holder* 888 F. Supp. 2d 113 (D.D.C. 2012), *vacated*, 133 S. Ct. 2886 (2013).

¹⁵² 133 S. Ct. 2612 (2013).

69. One of the United States' experts, Dr. Stephen Ansolabehere, was asked to determine the number of Texas registered voters who lack acceptable SB 14 identification, as well as to identify any racial disparities in rates of ID possession between Anglos, African Americans, and Hispanics. Subsequent to Dr. Ansolabehere's initial report, I am told, the state of Texas provided the Department of Justice with more than 3.1 million records related to Texas driver licenses and personal identification cards. As a result of analyzing these corrected data, Dr. Ansolabehere found that a smaller number of Texas registered voters lacked any of the photo identification documents required by SB 14. Instead of approximately 1.2 million, as I understand it, the number of registered voters without a required photo id appears now to be 786,727 (5.8% of the state's registered voters). According to Dr. Ansolabehere's current findings based on ecological regression, I am informed, only 3.6% of Anglo voters lack a required photo id, as compared with 11.9% of African American voters and 8.6% of Hispanic voters. Using racial estimates of individual registered voters provided by Catalist LLC, Dr. Ansolabehere found a similar pattern: 5.1% of Anglo voters lack a required photo id, as compared with 9.2% of black voters and 6.4% of Hispanic voters. In short, the corrected database matching process, like the estimates provided in Dr. Ansolabehere's initial report – and referenced in Paragraph 69 of my initial report – demonstrate that there is a significant racial disparity in possession of photo identification required by SB 14.

70. In his report, geographer Gerald Webster investigated racial disparities in social and economic characteristics in Texas and how those disparities affect access to DPS driver license offices, particularly in the state's three largest cities. He finds that the time required to travel to and from a DPS office can pose a significant obstacle for voters to obtain an EIC,

with the burden falling most heavily on potential voters who lack access to a motor vehicle. Professor Webster's data show that the cities of Houston, San Antonio, and Dallas contain more than half of the census tracts in Texas in which more than 25% of households do not have access to a motor vehicle. In Houston, San Antonio and Dallas, he finds that these tracts are overwhelmingly populated by African Americans and Hispanics and exhibit high rates of poverty. Prof. Webster's spatial analysis demonstrates that the use of the public bus system increases trip travel time several fold over the use of a motor vehicle. These findings indicate that in the three largest cities of the state registered voters who lack one of the specific photo ID documents required by SB 14 and who do not have access to a vehicle in their household, will have difficulty obtaining a document from DPS. Prof. Webster also shows that in Houston, San Antonio, and Dallas such persons are disproportionately African American or Hispanic.

71. The findings by Professors Ansolabehere and Webster, which I assume to be accurate, provide systematic quantitative evidence that confirms the common-sense arguments made by bill opponents throughout the debates that photo ID requirements would disproportionately burden Hispanic and Black voters.

The Struggle Over Minority Voting Rights in Texas, 1865-1965

72. Evaluating the historical background of any decision often assists in determining its purpose. In this instance the rationale offered for photo ID requirements in the bills considered by the Texas legislature from 2005 to the passage of SB 14 bears a striking resemblance to arguments for racially discriminatory restrictions on voting in the past. This justifies a brief review of the many efforts by Texas officials over the years to limit the political participation of African Americans and Mexican Americans.

73. Anglo Texans hostile to the political influence, potential or actual, of racial and ethnic minorities have attempted to minimize their voting strength from the Nineteenth Century to the present. Following passage of the Reconstruction Acts and the Fifteenth Amendment to the U.S. Constitution, Blacks and Latinos continued to vote for three decades despite harassment and increasing violence by Whites against them until the state, under Democratic control, enacted a series of laws designed to disfranchise both groups, including a constitutional amendment in 1902 imposing a poll tax as a prerequisite to vote.¹⁵³ These laws, combined with others, disproportionately discouraged minorities and the poor in general from voting.¹⁵⁴ A political science text summarizes this history succinctly: “Texas utilized almost every technique available except the literacy test and the grandfather clause to deny the vote or to make it expensive in terms of time, money, and psychological costs.”¹⁵⁵

74. The poll tax was justified in 1902 as a means of preventing voter fraud. As the editor of the *San Antonio Express* wrote that year: “By requiring a poll tax receipt, secured six months previous to an election, fraudulent elections can be prevented almost entirely.”¹⁵⁶ There were three features of the poll tax requirement that created obstacles to prospective voters. As political scientist Donald Strong noted during the period when the

¹⁵³ V.O. Key, Jr., *Southern Politics in State and Nation*, 578, 581, 585, 587-88 (New York: Alfred A. Knopf 1949).

¹⁵⁴ J. Morgan Kousser, *The Shaping of Southern Politics: Suffrage Restriction and the Establishment of the One-Party South, 1880-1910* (New Haven: Yale Univ. Press 1974), at 206-09.

¹⁵⁵ William Earl Maxwell and Ernest Crain, *Texas Politics Today* 69 (New York: West Publishing Co. 1987, 4th ed.).

¹⁵⁶ Quoted in Frederick D. Ogden, *The Poll Tax in the South* 7 (Tuscaloosa: Univ. of Alabama Press 1958).

poll tax was still in force: “The poll tax discourages voting by the lower-income groups. The tax is a trifle for the well-to-do; to the poor man it represents the price of a pair of shoes.”¹⁵⁷ Political scientist V.O. Key points to a second major obstacle, “the requirement that the tax be paid long in advance of the primary or election,” long before voter interest in the contest is at its height. Key noted a third problem, the logistical burden associated with paying the tax. “The necessity of taking a half day off to make a trip to the courthouse to pay the poll tax probably disfranchises more urban wage and salaried workers than does the disinclination to part with the dollar or so for the tax.”¹⁵⁸

75. In addition to the poll tax, which imposed a significant burden on low-income voters, in 1923 the legislature passed the “white primary” statute forbidding Blacks from voting in Democratic primaries when nomination therein guaranteed election.¹⁵⁹ The Democrats were essentially committed to white domination¹⁶⁰ and this continued to be true into the early 1960s despite growing factional splits among Democrats. There were also, however, overt expressions of racial prejudice among some Republicans as well.¹⁶¹

¹⁵⁷ Donald S. Strong, “The Poll Tax: The Case of Texas,” 38 *American Pol. Sci. Rev.* 701 (Aug. 1944).

¹⁵⁸ Key, *op.cit.*, 585, 589.

¹⁵⁹ For an in-depth description, see Sanford N. Greenberg, “White Primary,” 6 *The New Handbook of Texas* 940-41 (Austin: The Texas State Historical Ass’n 1996).

¹⁶⁰ In the 1950s, the strongly segregationist Democratic governor, Allan Shivers, headed what at the time was called the “Shivercrats.” On the side of civil rights for minorities was U.S. Sen. Ralph Yarborough, one of only three southern senators—and the only one from Texas—to vote in favor of the VRA.

¹⁶¹ For the gradual shift in partisanship, see Davidson, *Race and Class in Texas Politics* (Princeton, N.J.: Princeton Univ. Press: 1990), at 158-72.

76. In 1927 the state's white primary law was unanimously overturned by the U.S. Supreme Court as violating the Fourteenth Amendment of the U.S. Constitution,¹⁶² but as the Court's opinion applied solely to laws enacted by the state, the legislature soon passed a statute authorizing political parties to define the qualifications of their members, which the Democratic party then did—limiting members to Whites.¹⁶³ The U.S. Supreme Court in 1935 first held this to be constitutional¹⁶⁴ but in 1944 struck down that law as well in *Smith v. Allwright*.¹⁶⁵

77. The situation of Latino citizens during the first half of the Twentieth Century was in significant respects similar to that of Blacks. They were discouraged from participating effectively in politics. Although spread among all social classes, they were disproportionately poor and usually perceived as intellectually inferior. Like Blacks, they were relegated to an inferior caste status.¹⁶⁶ Anglo lynching of Latinos in Texas was widespread during Reconstruction and the decades immediately thereafter, and was quite similar in number to that of Blacks, *i.e.*, around 600.¹⁶⁷ Like Blacks, they consequently formed local and statewide organizations to protect their very lives, as well as their

¹⁶² *Nixon v. Herndon*, 273 U.S. 536, 540-41 (1927).

¹⁶³ Greenberg, *op. cit.*

¹⁶⁴ *Grove v. Townsend*, 295 U.S. 45 (1935).

¹⁶⁵ 321 U.S. 649 (1944). For an account of the context in which *Smith* was announced, see Davidson, *Race and Class in Texas Politics*, *op. cit.* at 159.

¹⁶⁶ Edward E. Telles and Vilma Ortiz, *Generations of Exclusion: Mexican-Americans, Assimilation, and Race* at 76-77 (New York: Russell Sage Found. 2008).

¹⁶⁷ Richard Delgado, "The Law of the Noose: A History of Latino Lynching," 44 *Harvard Civil Rights-Civil Liberties Law Review* 297-99 (Summer 2009).

interests, dignity, and rights in their sometimes physically dangerous quest for justice.¹⁶⁸

As with other Texans who were disproportionately poor, Latinos as a group had their vote suppressed by the financial burden of the poll tax. They were also discriminated against as allegedly non-white, and in some locales were subjected to the equivalent of the white primary law even before it became a statewide requirement. In historian David

Montejano's words:

In 1904 the State Democratic Executive Committee approved the practice of the White Man's Primary Association [a local South Texas organization] by suggesting that county committees require primary voters to affirm that "I am a white person and a Democrat." And in 1918, the legislature passed a law eliminating the interpreter at the polls and stipulating, moreover, that no naturalized citizens could receive assistance from the election judge unless they had been citizens for twenty-one years.¹⁶⁹

78. In short, like blacks, Latinos have long been relegated to an inferior social and political position, and as the U.S. Supreme Court has recently noted, "the political, social, and economic legacy of past discrimination' for Latinos in Texas may well 'hinder their ability to participate effectively in the political process.'"¹⁷⁰

The Era of the Voting Rights Act: 1965-2014

79. The racial divide in the early sixties was large. Jim Crow was still widespread—a fact dramatically illustrated when, in 1962, President John F. Kennedy's assistant secretary

¹⁶⁸ Arnolde de León and Robert A. Calvert, "Civil Rights," *Handbook of Texas Online* (<http://www.tshaonline.org/handbook/online/articles/pkcf1>); Steve Bickerstaff, *Lines in the Sand: Congressional Redistricting and the Downfall of Tom DeLay* at 37-38 (Austin: Univ. of Texas Press 2007).

¹⁶⁹ David Montejano, *Anglos and Mexicans in the Making of Texas, 1838-1986* 143 (Austin: Univ. of Texas Press).

¹⁷⁰ *League of United Latin Am. Citizens v. Perry*, 548 U.S. 399, 440 (2006) (quoting *Session v. Perry*, 298 F. Supp. 2d 451, 492 (E.D. Tex. 2004), *Thornburg v. Gingles*, 478 U.S. 30, 45 (1986)).

of labor, George Weaver, was turned away from the newly built Shamrock Hilton Hotel because he was black.¹⁷¹ This was in Houston, the state's largest city and one of its most urbane. Jim Crow remained in effect in some Texas venues even after passage of the Civil Rights Act of 1964.¹⁷²

80. In 1964, one year before passage of the VRA, the Twenty-fourth Amendment of the U.S. Constitution became law, abolishing the poll tax in federal elections, and two years later the U.S. Supreme Court in *Harper v. Virginia State Board of Elections* overturned its use in state and local elections as well.¹⁷³ Texas had always relied on the poll tax list in lieu of an official voter registration list, as political scientist Walter Dean Burnham points out: "The paid-up poll tax receipt was used by election officials as the equivalent of personal registration."¹⁷⁴ Following *Harper*, Gov. John Connally, a Democratic racial conservative, called a special session of the legislature in 1966 to create a new registration system, and over the objections of the few ethnic minority members and their allies charged the body with drawing up an annual registration system described by one reporter as "patterned on the old poll tax system, but minus the tax." Anticipating the justification offered for SB 14 almost half a century later, Gov. Connally described the bill as "the most logical means of preventing fraud and guaranteeing purity of the ballot box."¹⁷⁵ The legislature then

¹⁷¹ Mary Beth Rogers, *Barbara Jordan: American Hero* (New York: Bantam Books 1998), at 89.

¹⁷² Montejano, *op. cit.* at 285-6.

¹⁷³ 383 U.S. 663, 666-67 (1966).

¹⁷⁴ Walter Dean Burnham, "A Political Scientist and Voting Rights Litigation: The Case of the 1966 Texas Registration Statute," 1971 *Wash. U.L.Q.* 335, 339 (1971).

¹⁷⁵ "The Special Session," 58 *The Texas Observer* 7 (Feb. 18, 1966); *see also* Chandler Davidson, *Race and Class in Texas Politics*, *op. cit.*, at 51-53.

proposed an amendment to the state constitution—subsequently ratified by a majority of voters—providing an annual four-month registration period, similar to that in 1904, ending approximately nine months before the November election. This was subsequently ruled unconstitutional in *Beare v. Briscoe* (1971).¹⁷⁶

81. Passage of the VRA in 1965 was hailed by the state’s minority leaders as a huge step forward. Soon numerous suits were filed challenging a host of discriminatory election laws. Some targeted laws diluting minority voting strength through such measures as gerrymandering and at-large elections—practices judged unconstitutional in a legislative redistricting case originating in Texas, *White v. Regester*.¹⁷⁷ *White* led to numerous challenges to at-large and multi-member districts locally in Texas. Most of the changes from at-large to district elections in Texas were the result of either litigation or credible threats thereof.¹⁷⁸

82. A 1981 study of changes from at-large to single-member-district elections in 41 Texas jurisdictions, all of which had a minority population of at least 10%, reported a tripling of the number of Black and Hispanic officeholders as a result of the adoption of fair district election plans.¹⁷⁹ Race also played a major role in the redistricting process—sometimes with Republicans, Blacks, and liberal white Democrats working together against the gerrymandering efforts of conservative Democrats, and then, as the two-party system

¹⁷⁶ 498 F.2d 244, 245 (5th Cir. 1974).

¹⁷⁷ *Brischetto, et al., op. cit.*, at 242-6; *White v. Regester*, 412 U.S. 755 (1973).

¹⁷⁸ *Ibid.*, 254.

¹⁷⁹ Chandler Davidson, “Reforming a Reform: The Attack on Multimember Districts,” in Merle Black and John Shelton Reed (eds.), 1 *Perspectives on the American South*, 145-46 (New York: Gordon and Breach 1981).

developed more robustly, with pro-civil rights Whites and their minority colleagues working together in the Democratic party and conservative Whites migrating to the GOP.¹⁸⁰

83. A major step forward in preventing vote discrimination occurred in 1975 when the Congress decided to bring Texas and various other states with significant language-minority populations under coverage of Section 5 of the VRA, thanks in significant measure to the 1972 election of a black Congresswoman, Barbara Jordan from Houston, who as a member of the Judiciary Committee helped lead efforts to bring these states under Section 5.¹⁸¹

84. In the same period the legislature finally passed a law requiring bilingual ballots in Spanish-speaking areas.¹⁸² Leonel Castillo, Houston city controller and one of the first Latinos elected in Houston citywide, testified before Congress that he had received complaints from South Texas Latinos of harassment by Anglo poll watchers, insufficient or incorrect voting assistance from officials, absentee ballot bias, intimidation by law enforcement officers, economic reprisals against Latinos who voted, and prejudicial location of polling places.¹⁸³

¹⁸⁰ Kousser, *Colorblind Injustice*, *op. cit.*, at 283-316.

¹⁸¹ Rogers, *op. cit.* Chapter 15. Before her election to Congress Jordan, talented though she was, ran in 1962 and 1964 for a seat in the state legislature and lost. At that time all legislative seats in Harris County were elected at-large. The same was true of senatorial seats, but a court ruling forced Texas to draw districts roughly equal in population, giving the county three districts and part of a fourth—one with a sufficiently large minority population for Jordan to win a seat—the first African American elected to the state senate since Reconstruction.

¹⁸² Art Wiese, “All Texas Counties Affected if Voting Rights Act Broadened,” *Houston Post*, May 4, 1975.

¹⁸³ *Ibid.*

85. Between the time Texas was brought under Section 5 coverage in 1975 and April 2013, the Justice Department posted 207 objection letters to jurisdictions planning election-related changes within the state.¹⁸⁴ As more than one voting change can be targeted in a single objection letter the actual number of objections understates the totality of affected practices. These practices embrace the spectrum of discriminatory election procedures: racial gerrymandering, racially discriminatory purges of registered voters, imposition of dilutive laws requiring numbered posts and the majority-runoff requirement, annexations diluting minority votes, a faulty bilingual oral assistance program, reduction in the number of elected officials, transfer of duties from an official of one race to that of another, and unfair changes in election dates, among other infractions.

86. Among the numerous Texas objections were three interposed in Waller County, the first in 1976 and the most recent in 2002. About forty miles west of Houston, the county is home to Prairie View A&M, an historically black university whose students have been a target of vote suppression by white county officials from the 1970s on, when the Twenty-Sixth Amendment to the U.S. Constitution enabled citizens 18 years old and over to vote. These officials tried numerous ploys over the years, beginning with efforts by the county tax assessor, to prevent students from voting—claiming they were not legal residents of the county unless their parents lived there or the students owned real estate in the county. These discriminatory efforts were rejected in the 1979 U.S. Supreme Court decision, *Symm*

¹⁸⁴ U.S. Dep't of Justice,
http://www.justice.gov/crt/records/vot/obj_letters/state_letters.php?state=tx.

v. United States.¹⁸⁵ White officials on a number of occasions continued trying to suppress minority student voting in the county into the 21st century.¹⁸⁶

87. In preparation for congressional hearings on renewing the nonpermanent provisions of the VRA, the National Commission on the Voting Rights Act conducted an extensive study, based in part on information obtained at ten hearings across the country, that was published by the Lawyers Committee for Civil Rights Under Law.¹⁸⁷ The National Commission was, according to its organizers, a “politically and ethnically diverse group of men and women, including former elected and appointed public officials, scholars, lawyers, and leaders.”¹⁸⁸ The Commission reviewed the number of Section 5 declaratory judgment actions favorable to minority voters and the number of successful Section 2 cases filed by minority plaintiffs. Section 5 declaratory judgment actions were relatively rare but Texas filed nine between 1975 and 2004.¹⁸⁹ In addition, Texas led all nine states covered by Section 5 in the number of successful Section 2 cases (reported and unreported) filed

¹⁸⁵ 439 U.S. 1105 (1979).

¹⁸⁶ For an historical overview of these student-targeted suppression efforts, see David R. Richards, *Once Upon a Time in Texas: A Liberal in the Lone Star State* (Austin: Univ. of Texas Press, 2002), Chapter 16; Nina Perales, Luis Figueroa and Criselda G. Rivas, “Voting Rights in Texas: 1982-2006,” 71:2 *Review of Law and Social Justice*, 733 (2008).

¹⁸⁷ The National Commission on the Voting Rights Act, *Protecting Minority Voters: The Voting Rights Act at Work, 1982-2005* (Washington, D.C.: Lawyers Comm. for Civil Rights Under Law 2006); see also *Highlights of Hearings of the National Commission on the Voting Rights Act* (Washington, D.C.: Lawyers Comm. for Civil rights Under Law 2006) (supplement). In the interest of full disclosure, I was the principal author of this report and the supplement.

¹⁸⁸ *Ibid.* (*Protecting Minority Voters*), at 1.

¹⁸⁹ *Protecting Minority Voters, op. cit.*, Map 6 (no pagination).

between 1982 and 2005. There were a total of 653 such cases, and 206 were in Texas.¹⁹⁰ Most of these were cases settled through a court-ordered consent decree without trial.¹⁹¹ In recent decades, courts do not often make findings that a law was adopted with a racially discriminatory intent because the Section 5 effects and Section 2 results tests have been available. Even so, as recently as August 2012, a federal court ruled that Texas had failed to meet its burden under Section 5 of proving that its state senate and congressional redistricting plans were not intentionally racially discriminatory.¹⁹² That the same legislature enacted intentionally discriminatory redistricting plans in 2011, according to this court finding, provides a strong indicator that the same decision-makers were acting with a racial purpose in adopting SB 14.

Racial Appeals in Electoral Contests

88. Racial prejudice in Texas campaigns has by no means disappeared in the current century and is reflected in appeals to voters made by candidates and officeholders. Dramatic examples are found occasionally in campaign advertisements or mailers. In one case, Terry McConn, a white candidate and son of Houston's former mayor Jim McConn, campaigned for a post on the non-partisan Houston city council in 2003 opposing Pakistani-American M.J. Khan—sending a mailer showing a photo of the latter. Under the heading, “Birds of a Feather Flock Together,” were photos of five local minority

¹⁹⁰ *Ibid.*, Table 5 (no pagination). For an in-depth account of voting problems in Texas through 2006, see Nina Perales, Luis Figueroa and Criselda G. Rivas, *op. cit.*, at 713ff.

¹⁹¹ Ellen Katz, *et. al.*, *Documenting Discrimination in Voting: Judicial Findings Under Section 2 of the Voting Rights Act Since 1982* (2005), reprinted in, *To Examine Impact and Effectiveness of the Voting Rights Act: Hearing Before the Subcomm. on the Constitution of the H. Comm. on the Judiciary*, 109th Cong. 16, 964-1124 (2005).

¹⁹² *Texas v. United States*, 887 F. Supp 2d 133 (D.D.C. 2012), *vacated*, 133 S. Ct. 2886 (2013).

officeholders, four Blacks and the Asian American Khan, with this message: “M.J. Khan thought you’d be impressed with these endorsements—because he sought and earned each one.”¹⁹³ There was no discussion of issues, only the implication that Khan was aligned with Blacks and not Whites.¹⁹⁴

89. More germane to the photo ID issue was another mailer sent out by the conservative Empower Texas PAC in 2008, attacking Democrat Joel Redmond, a white candidate for state representative in the Houston area, who is shown surrounded by ethnic minorities—three well-known black officeholders, a Latino officeholder, and President Obama. Among his positions listed in the mailer is “opposed to voter photo ID.”¹⁹⁵ Intra-party racial issues also occasionally surface in public. In the 2012 U.S. Senate contest between Texas Solicitor General Ted Cruz, of Cuban ancestry, and Lt. Gov. David Dewhurst, the Dewhurst campaign used an advertisement that accused Cruz of aligning with groups favoring amnesty for illegal immigrants—a claim immediately denied by a Cruz spokesman. Cruz allies alleged that racism in Dewhurst’s ad played on anti-Hispanic fears in the state.¹⁹⁶

90. More recently, in early 2014 former Republican representative Aaron Peña, who had supported passage of SB 14, publicly warned his party that if its “inflammatory rhetoric” on issues such as immigration went too far, it would cause even Hispanic

¹⁹³ Mailer in possession of the author.

¹⁹⁴ For more on the racial aspects of the campaign, see Bruce Nichols, “Front-runner in council race builds on growing ethnic clout,” *Dallas Morning News*, Nov. 23, 2003. A copy of the flier is in the possession of the author.

¹⁹⁵ Mailer in the possession of the author.

¹⁹⁶ Robert T. Garrett, *Dallas News*, May 24, 2012.

conservatives to protest in the run-off elections.¹⁹⁷ In Texas, invoking the threat of “immigrants” voting can be an indirect appeal to anti-Latino voters in general.¹⁹⁸

91. Racial appeals continued in the 2014 election season. Dan Patrick, a popular Houston talk-show host and Texas state senator, used anti-immigrant rhetoric in his successful Republican primary campaign for lieutenant governor against Dewhurst, charging that Texas faced an “invasion” from Mexico.¹⁹⁹ This kind of language reflected racial attitudes long expressed by some Texans. During the 1920s “whether born in the United States or Mexico, all persons of Mexican origin were often considered Mexican and alien.”²⁰⁰ “Twenty-five percent of the newcomers,” estimated Cameron County sheriff Emilio Forto (in 1919), “usually look upon the Mexican as filthy, unsanitary and sickly.”²⁰¹

92. According to news accounts, Sen. Patrick’s anti-immigrant comments in the 2014 campaign for lieutenant governor were criticized by fellow Republicans who were Hispanics. Hector De Leon, chairman of the Associated Republicans of Texas, referred to

¹⁹⁷ Peggy Fikac, “Intramural struggles dog Democrats, GOP as Election Day nears,” *Houston Chronicle*, Feb. 27, 2014.

¹⁹⁸ In this regard, recent research has found that white respondents do not treat threatening immigrant behavior equally with respect to different immigrant groups. Instead, transgressions such as remaining in the country without legal documentation, working without paying taxes, and failing to support traditional symbols of American identity, are considered more offensive if committed by Hispanic than non-Hispanic immigrants. See Todd K. Hartman, Benjamin J. Newman, and C. Scott Bell, “Decoding Prejudice Toward Hispanics: Group Cues and Public Reactions to Threatening Immigrant Behavior,” 36:1 *Political Behavior* 145, Mar. 2013.

¹⁹⁹ Patricia Kilday Hart, “Are Democrats pulling for Patrick?” *Houston Chronicle*, Mar. 3, 2014; Mike Ward, “Analysts: Dewhurst win not in the cards from start,” *Houston Chronicle*, May 29, 2014.

²⁰⁰ Edward Telles and Vilma Ortiz, *Generations of Exclusion: Mexican Americans, Assimilation, and Race* 84 (New York: Russell Sage Found. 2008).

²⁰¹ Montejano *op. cit.*, at 225.

Patrick's "illegal invasion" remarks regarding Latinos as "thinly veiled racism."²⁰²

93. During the current contest between Attorney General Greg Abbott and State Senator Wendy Davis, Abbott asked Ted Nugent, a rock musician and long-time Texas resident, to accompany him on the campaign trail. Nugent is well-known for his public vulgarity and racism. He has used the N-word in radio interviews, said illegal immigrants should be treated as "indentured servants," and a month before joining Abbott, publicly called President Obama "a subhuman mongrel."²⁰³ Abbott, when criticized for asking Nugent to campaign with him, denied knowledge of these statements, but not until several days after the news broke and Nugent had apologized for his remarks about the President did Abbott finally say Nugent was right to apologize for what he called the "wrong" language. According to a University of Texas political scientist and pollster, "I see it as speaking to the electorate as Greg Abbott finds it in 2014"—an electorate that is approximately two-thirds white and quite conservative on matters of race.²⁰⁴

Summary and Conclusions

94. The adoption of SB 14 by the State of Texas in 2011 culminated years of conflict between advocates of more restrictive voter identification laws, including the use of photo

²⁰² See, e.g., Carlos Sanchez, "COMMENTARY: Wooing Hispanic votes," *Houston Chronicle*, 9 Mar. 2014; Alexa Ura, "Eyeing Hispanic Voters, Patrick Shifts His Tone," *Texas Tribune*, May 29, 2014.

²⁰³ Peggy Fikac, "Abbott takes heat for Nugent invite," *Houston Chronicle*, Feb. 18, 2014.

²⁰⁴ Julie Fancher and Christy Hoppe, "Abbott defends Nugent with knock at Obama," *dallasnews*, Feb. 18, 2014. <http://www.dallasnews.com/news/politics/headlines/20140218-abbott-dash-defends-nugent-with-knock-at-obama.ece>; Peggy Fikac, "Nugent flap proof that it matters who's at table," *Houston Chronicle*, Feb. 24, 2014; Jay Root, "Analysis: In Abbott World, Nugent Flap Much Ado About Nothing," *The Texas Tribune*, Feb. 26, 2014.

ID requirements, that began in 2005. Following the Republican landslide victory in the 2010 legislative elections, supporters of a restrictive photo ID bill had sufficient votes to impose its will on the opponents of photo ID requirements, who were by then almost entirely African American and Hispanic. The majority rejected most of the ameliorative amendments introduced by minority legislators and as a result the law adopted in 2011, SB 14, was among the most restrictive photo ID laws in the nation. The warnings of bill opponents about the likely effects of SB 14 have proven accurate. Analysis by other experts in this case concludes that registered voters without necessary photo ID 1) are disproportionately African American or Hispanic; 2) are numerically concentrated in large cities; 3) in the three large cities examined are more likely than Anglos to live in households without access to vehicles; 4) as a result of lacking access to vehicles are dependent on public transportation in those three cities; and 5) as a result of dependence on bus systems in those three cities face a greater cost in time spent obtaining a state-issued photo id needed to satisfy SB 14.

95. The timing of the first introduction of voter ID legislation, in 2005, is an indicator of the purposes of those advocating photo ID requirements. The 2000 census data, showing a significant increase in the ratio of Texas Latinos of voting age to Whites, and a disproportionate increase in Latino children compared to Anglo children, received attention across the state. Before the 2007 session the Census Bureau announced that in 2004 Texas had become a minority-majority state, although a significant percentage of Hispanic persons were not citizens (and thus not eligible to vote). Nevertheless, legislators were well aware that Hispanic voting strength was increasing rapidly.

96. In 2007 and 2009, the legislature again considered voter identification bills. As opponents of voter identification successfully blocked the bills introduced in each legislative session, by heroic efforts, bill supporters decided to change the procedures in each successive session to minimize their opponents' influence. These procedural changes are an important part of the sequence of events culminating in the final adoption of a strict photo ID requirement.

97. In 2009 the Texas Senate changed the long-standing practice of requiring the support of two-thirds of Senators to consider a bill out of order on the calendar. The only other type of bill for which the two-thirds rule had been altered in recent decades was redistricting. The rule change adopted in 2009 created a special exception for "voter identification requirements"—and no other legislation—to be set as a special order by a majority of the Senators. Adoption of this rule guaranteed that, even if every bill opponent were present and voting, opponents would be unable to block passage of a voter identification bill. This rule change enabled voter identification supporters to pass SB 362 in the Senate. Opponents in the House, however, used a procedure similar to a filibuster, known in Texas as "chubbing," to block the passage of SB 362.

98. In response to this defeat, in 2011, not only did bill supporters in the Senate once again adopt the 2009 rule absolving voter identification bills from the two-thirds requirement, but Lt. Gov. Dewhurst referred SB 14 directly to the Senate Committee of the Whole, which allowed the chamber to expedite consideration of the bill. The House changed its procedures related to chubbing. Speaker Straus also departed from the usual practice of committee assignment by referring the bill to a Select Committee on Voter Identification and Voter Fraud, which considered only SB 14 and no other legislation. Yet

another departure was the House's refusal to allow the public to attend a house committee meeting that was supposed to be open to the public. Because the meeting was held at night after the Capitol was closed, public attendance was precluded. In addition, Gov. Perry designated SB 14 as emergency legislation, allowing it to be considered in the early days of the legislative session.

99. As SB 14 was considered, ethnic minorities complained publicly about the use of racially insensitive language by some of the supporters of the bill, and their tendency to conflate "non-citizens" and "illegal immigrants" with Latinos generally in discussing voter fraud. This is perhaps not surprising in light of the continuing use of racial campaign appeals by some of those legislators when on the hustings.

100. Despite proponents' claim that SB 14 would help combat voter fraud by non-citizens, the most common form of acceptable ID at the polls, a Texas driver license, may be obtained legally by non-citizens who are lawfully residing in Texas. Key bill supporters failed to determine whether, in fact, SB 14 would prevent non-citizens from voting by restricting allowable forms of ID to U.S. citizens while arguing repeatedly that SB 14 would have that effect.

101. Supporters of SB 14—the most draconian of all the bills filed beginning in 2005—rejected almost all of the ameliorative provisions introduced by minority legislators, including amendments that would not alter the stated purpose of the bill, such as extending the hours at DPS offices or studying the impact of SB 14 on minority voters. Even the bill that caused such a bitter fight in 2009 allowed non-photo alternatives, but amendments that would have allowed the use of the 2009 alternatives were voted down by the majority,

leaving only seven state or federal documents with photo ID that would satisfy the requirements of SB 14.

102. Despite numerous claims of widespread election fraud of many kinds by legislative supporters of more stringent voting laws from 2005 to passage of SB 14 in 2011, and despite ongoing attempts to uncover such fraud throughout this period, virtually no cases of impersonation fraud were discovered.²⁰⁵ The absence of evidence of widespread fraud of the only kind a photo ID would prevent (in-person voter impersonation) forced supporters of strict photo ID laws search for other justifications, such as preserving public confidence in the integrity of the Texas electoral process. But legislators could point to nothing more than anecdotal evidence that the public doubted the integrity of the state's electoral process and public opinion polls showing support for voter ID.²⁰⁶

103. In examining the purposes underlying a decision, it is important to understand the historical context in which the decision was made. Texas has a long history of racial discrimination affecting voting, both in the long term and the short term. Like other states of the former Confederacy, Texas was particularly harsh in its efforts to prevent minority citizens from voting or from electing their candidates of choice—from the end of Reconstruction until the enactment of the Voting Rights Act. The poll tax was the key disenfranchising device adopted at the turn of the Twentieth Century (1902). The rationale

²⁰⁵ During this period, tens of millions of votes were cast in Texas in national, state, and local elections. In the 2008 and 2012 presidential elections alone Texans cast 16,071,646 votes. The latter figure represents only a portion of all the ballots cast in Texas in that four-year period, including votes in party primaries and run-offs, statewide off-year elections, and those cast in local jurisdictions. In 2007 Texas had 4,835 local jurisdictions. Yet despite all the votes cast in all these elections, virtually no in-person voter fraud has been documented.

²⁰⁶ Sen. Debate, Mar. 10, 2009, at 742-50; TX_00001569-71 (*Texas v. Holder*).

offered by supporters for its adoption—to prevent voter fraud—bears a striking resemblance to one of the arguments used by proponents of SB 14. The same rationale was also used to justify a restrictive voter registration law adopted in 1966 after the poll tax was found unconstitutional. In both the poll tax and the 1966 registration law, meeting the requirements placed obstacles in the path of the prospective voter. The need to obtain and keep for months the poll tax receipt needed to vote in primary or general elections was difficult, as was the need to give up hours of work (and thus wages) to go to the courthouse and pay the tax. The need to re-register at the courthouse annually after 1966 was far more burdensome than the registration process in any other state.

104. Despite the fact that the 1902 poll tax disenfranchised most African Americans and Hispanics, Texas law authorized the Democratic Party's use of what was called a "white primary," that after several decades was struck down as unconstitutional by the U.S. Supreme Court, first in 1927 and again in 1944.

105. Passage of the Voting Rights Act by no means brought an end to efforts to limit the ability of minority citizens to participate equally in the political process. Along with important U.S. Supreme Court cases such as *White v. Regester*, the VRA provided legal tools with which minorities, with help from the U.S. Department of Justice and the Federal judiciary, could combat the efforts of Texas officials to limit or dilute minority voting strength. Texas has seen some aspects of its redistricting process struck down as racially discriminatory by Federal courts in every redistricting cycle since 1970. A Federal court's conclusion in a recent Texas redistricting case that the same Anglo-dominated legislature that passed SB 14 also intentionally discriminated against minority voters in legislative redistricting lends added weight, beyond the facts presented here, to the claim that passage

of SB 14 was an intentional racially discriminatory act. In both instances the Anglo majority who were the key decision-makers, along with the Anglo Governor and Lieutenant Governor, changed procedural rules, refused to examine data regarding the likely impact of their bills, ignored ameliorative amendments proposed by minority legislators, and used pretextual arguments to defend their bills.²⁰⁷

106. In sum, the evidence presented in the preceding pages, examined with the methodology common to social scientists such as myself, indicates that SB 14 was adopted with a racially discriminatory purpose.

²⁰⁷ *Texas v. United States*, 887 F. Supp. 2d 133, 161 (D.D.C. 2012), *vacated*, 133 S. Ct. 2886 (2013). In that case, the court found that Texas failed to meet its burden of demonstrating that its state senate and congressional redistricting plans were not enacted with a racially discriminatory purpose and that the state house and congressional redistricting plans violated Section 5 of the VRA in terms of their effect on minority groups. The court noted: “The parties have provided more evidence of discriminatory intent than we have space, or need, to address here.”

I declare under penalty of perjury that the foregoing is true and correct. Executed this 15th day of August, 2014.

A handwritten signature in black ink, appearing to read "Chandler Davidson", written over a horizontal line.

Chandler Davidson

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs,

v.

RICK PERRY, *et al.*,

Defendants.

Civil Actions No. 2:13-cv-193 (NGR)

UNITED STATES OF AMERICA,

Plaintiff,

TEXAS LEAGUE OF YOUNG VOTERS
EDUCATION FUND, *et al.*,

Plaintiff-Intervenors,

TEXAS ASSOCIATION OF HISPANIC
COUNTY JUDGES AND COUNTY
COMMISSIONERS, *et al.*,

Plaintiff-Intervenors,

v.

STATE OF TEXAS, *et al.*,

Defendants.

Civil Action No. 2:13-cv-263 (NGR)

TEXAS STATE CONFERENCE OF NAACP
BRANCHES, *et al.*,

Plaintiffs,

v.

NANDITA BERRY, *et al.*,

Defendants.

Civil Action No. 2:13-cv-291 (NGR)

BELINDA ORTIZ, *et al.*,

Plaintiffs,

v.

STATE OF TEXAS, *et al.*,

Defendants

Civil Action No. 2:13-cv-348 (NGR)

UNITED STATES' NOTICE OF FILING OF
THE EXPERT REPORT OF YAIR GHITZA

At the Court's direction, the United States hereby files the expert report of Yair Ghitza,
which is attached hereto.

Date: June 27, 2014

KENNETH MAGIDSON
United States Attorney
Southern District of Texas

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on June 27, 2014, I served a true and correct copy of the foregoing via the Court's ECF system on the following counsel of record:

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

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RICK PERRY, *et al.*,

Defendants.

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UNITED STATES OF AMERICA,

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STATE OF TEXAS, *et al.*,

Defendants

Civil Action No. 2:13-cv-348 (NGR)

DECLARATION OF YAIR GHITZA

Pursuant to 28 U.S.C. § 1746, I, Yair Ghitza, make the following declaration:

Report on Statistical Estimation of the Race of Individual Registered Voters in Texas

1. My name is Yair Ghitza. I am the Chief Scientist at Catalist, LLC, a data services company that collects, standardizes, and enhances data from official voter registration databases, as well as other commercial, public, and private data sources. I have over 10 years of experience in statistics, political science, and computer science in both professional and academic settings. At Catalist, I am mainly responsible for constructing and overseeing the construction of thousands of predictive models. Usually, these models predict some characteristic, attitude, or likely behavior of the people in the database. I have built these types of models for a wide range of topics, from likelihood of voting in a particular election, to likelihood of having children in the household, conditional on a wide range of other data points. I also lead the research efforts of Catalist, often building new statistical methods to deal with different types of data, and developing new methods of leveraging the data to help our clients achieve their goals.
2. I successfully defended my doctoral dissertation in March 2014 and will shortly be receiving a PhD from Columbia University in Political Science. My dissertation—*Applying Large-Scale Data and Modern Statistical Methods to Classical Problems in American Politics*—was accepted with distinction and is currently nominated for the annual Savage Award in Applied Methodology, awarded to a dissertation that makes outstanding contributions in the field of applied Bayesian statistics. My main areas of expertise are statistical methods and American politics, particularly focusing on estimating public opinion. Prior to my time at Columbia, I was a visiting research assistant in the Media Lab at MIT, performing core research in artificial intelligence and computer vision.
3. My academic work has appeared in journals such as the American Journal of Political Science; The Forum; Statistics, Politics, and Policy; and Proceedings of the IEEE International Symposium on Wearable Computers. It has also been featured at invited conferences such as the Annual State Politics and Policy Conference; the Annual Meeting of the Society for Political Methodology; the Annual Meeting of the American Political Science Association; the Annual Conference of the Public Choice Society; the Annual Conference of the European Political Science Association; and the Mapping Science Committee at the National Academy of Sciences. My C.V. is attached to this report.
4. Catalist was compensated at a rate of \$5.00 per thousand voters to provide the data regarding Texas registered voters discussed in this report—specifically, racial identification estimates along with geographic and other data, such as whether this voter is deceased, as discussed in this report. For my work in preparing this report and testifying at trial, Catalist is compensated at a rate of \$150 per hour. I have not previously provided expert testimony in any litigation.
5. Catalist is a data utility that provides services to civic engagement and advocacy organizations as well as political campaigns. Catalist compiles, enhances, stores, and updates person-level data for the entire U.S. adult population. Additionally, Catalist provides tools, services, analyses, and expertise to facilitate planning, analyzing, and executing data-driven voter contact and other civic advocacy programs.

6. Catalist maintains a national database of voting-age persons, the data for which is obtained from official voting rolls in all 50 states and the District of Columbia, as well as from national commercial consumer databases. Combining these datasets with publicly-available data, such as Census data, and private data from our clients and business partners, results in a national database that contains nearly a thousand attributes, giving Catalist a rich, national database of civic and commercial behavior that is updated state-by-state on an ongoing and periodic basis, with multiple updates of state data occurring as frequently as every week. These updates may include new information on individuals' voter registration status, voting history, official political and administrative districts, deceased records, household income level, residence changes, and hundreds of other attributes, some of which are estimated through statistical models. Catalist then augments its database with a number of modeled predictions about each person's likely civic behavior or preferences on a number of subjects relevant to civic participation.
7. For several states such as South Carolina, Louisiana, Florida and North Carolina, data from official voter rolls includes information about a voter's self-reported race, which is collected when the voter registers to vote for the first time or updates his/her registration. The Catalist database includes this race information from states that collect it from voters. When self-reported race is unavailable, Catalist uses statistical estimates based on other attributes to estimate voters' race.
8. Catalist purchases these estimates from vendors who are experts in creating statistical models specifically to predict voter race and ethnicity. In 2009, Catalist conducted an extensive comparison of the products offered by several commercial race coding vendors. Catalist measured the accuracy and coverage of the various vendors by comparing them against a large sample of self-reported race from voter rolls, surveys and other person-level contact programs that Catalist has collected since 2006.
9. Based on this initial analysis, Catalist selected the data vendor CPM Technologies as the source of Catalist's modeled race data. CPM race coding has since been re-validated regularly by Catalist to measure continued race modeling accuracy, again through the use of self-reported race from both officially sourced voter files and data from hundreds of polls conducted by Catalist's clients that asked survey respondents a racial demographic question. This allows Catalist to compare CPM's modeled race prediction for an individual with the individual's own, self-reported racial identity. The most recent re-validation is described in paragraph 15.
10. In Catalist's database, where self-reported race from official voting rolls is available, that self-reported race is used. Where race information is not available, Catalist uses CPM Technologies race coding algorithms to predict race.
11. CPM's race coding algorithm uses a multi-layered, tree based approach. This means that the algorithm looks at combinations of demographic and other information (e.g., first name, location, sex) and assigns the most likely race based on those combinations. To find out which were the most likely combinations, CPM "trained" the model using data where all the information including race were known. CPM "retrains" the statistical model once a year on average with updated data. Each time CPM retrains the model, it provides Catalist with a new program to assign the predicted race.
12. Every year, CPM trains the model using census data, voter file data where permissible to be used for commercial purposes, and data from various commercial vendors. CPM does external validation on the models using self-reported survey responses and self-reported race records from official voter databases that does not overlap with the training set of voter file race data, ensuring that the models generalize to the full population instead of just the data that was used to build the model. Both tree-

based modeling and this method of validation are in line with widely accepted standards and practices in predictive modeling and analytics.

13. The CPM algorithm assigns a race to each record along with a “race confidence” value, a measure of the accuracy CPM ascribes to a given modeled race value. These race confidence values are segmented by CPM Technologies in to the following values, ordered from most confident in the appended race to least confident:

1. Highly Likely
2. Likely
3. Possibly

Catalist records may also carry no race confidence value if the race value is sourced from the voter file or records may be labeled with a race confidence value of “Uncoded” if race value was neither available from official voting rolls or the CPM Technologies algorithm was unable to assign any single race value to the record with sufficient confidence.

14. Catalist has compared the predicted race from the algorithm with the self-reported race from voter rolls where that data is available. For records with the highest race confidence scores, Catalist has found that the predictions match the voters’ self-reported race with 90% accuracy or greater in most cases. This relationship between confidence scores and accuracy is covered more fully in paragraph 15.
15. Catalist most recently validated CPM race coding results against the self-reported race available on certain voter files in early 2014. A topline of that validation is shown in the table below. Here, we applied CPM’s race coding technology to database records in nine states that include self-reported race on the official voter rolls: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. We compared CPM’s predictions (as seen in each row of the table) to self-reported race, among people who did self-report their race, in order to determine how accurate CPM’s predictions were.

Race	N_size	CPM Race Confidence Percentage				CPM Percent Correct		
		Highly Likely	Likely	Possibly	Uncoded	Highly Likely	Likely	Possibly
White	21315485	70%	21%	7%	2%	97%	91%	78%
Black	8029434	40%	19%	42%	0%	93%	81%	54%
Hispanic	2206470	47%	21%	32%	0%	90%	77%	58%
Asian	282925	41%	21%	38%	0%	90%	76%	39%
Native American	74560	67%	10%	22%	0%	15%	69%	30%
Other	110989	0%	0%	0%	100%	NA	NA	NA
Unknown	32336	0%	0%	0%	100%	NA	NA	NA

16. The race data on the Catalist file has been used and relied on in academia regularly. Recent academic studies that used Catalist’s race data include the following:

- Mann, Christopher B., and Casey A. Klofstad. "The Role of Call Quality in Voter Mobilization: Implications for Electoral Outcomes and Experimental Design." *Political Behavior* (2010).
- Ansolabehere, Stephen, and Eitan Hersh. "Validation: What Big Data Reveal About Survey Misreporting And The Real Electorate." *Political Analysis* (2012).
- Ansolabehere, Stephen, and Eitan Hersh. "Gender, Race, Age and Voting: A Research Note." *Politics and Governance* (2013).

- Enos, Ryan D., and Anthony Fowler. "The Effects of Large-Scale Campaigns on Voter Turnout: Evidence from 400 Million Voter Contacts." Working Paper (2013).
- Fraga, Bernard L. "Winning the Race, Losing the Base? Demobilization, Competitiveness, and Electoral Influence." Working Paper (2013).
- Hersh, Eitan and Clayton Nall. "A Direct-Observation Approach to Identify Small-Area Variation in Political Behavior: The Case of Income, Partisanship, and Geography." Working Paper (2013).
- Hersh, Eitan D., and Brian F. Schaffner. "Targeted Campaign Appeals And The Value Of Ambiguity." *The Journal of Politics* (2013).
- Rogers, Todd, and Masahiko Aida. "Vote Self-prediction Hardly Predicts Who Will Vote, And Is (Misleadingly) Unbiased." *American Politics Research* (2014).
- Fraga, Bernard L. "Assessing the Causal Impact of Race-Based Districting on Voter Turnout." Working Paper (2014).
- Fraga, Bernard L. "Candidates or Districts? Reevaluating the Role of Race in Voter Turnout." Working Paper (2014).
- Ashok, Vivekinan, et al. "Dynamic Voting in a Dynamic Campaign: Three Models of Early Voting." Working Paper (2014).

Some findings from these academic papers that were specific to Catalist race coding include the Hersh and Nall (2013) paper, which used Catalist race data to look at differences in regional voting based on income. They found the Catalist race data to be an important part of the trends discovered in this research. Ansolabehere and Hersh (2012) included a validation of Catalist race data against 2008 online survey panels that yielded a strong alignment. Hersh and Schaffner (2013) also report validation statistics that are in the expected range. As some of these academic papers have discussed, Catalist has a vested interest in assuring that the race predictions it maintains in its database and provides to clients are as accurate and unbiased as possible.

17. Catalist's database also indicates whether persons on official voter rolls are believed to be deceased. Catalist obtains death information from multiple sources, both official and commercial. Catalist subscribes to the Social Security death master file, which is updated monthly, and those updates are matched and merged into the Catalist deceased indicator. Catalist also sources deceased information from Interactive Marketing Solutions, a company that maintains a Recently Recorded Deceased File and a Deceased Do Not Call list. These two files are updated monthly, and those updates are also matched and merged in to the Catalist deceased indicator.
18. Furthermore, Catalist's database indicates whether persons on a state's official voter rolls have submitted a National Change of Address (NCOA) to the United States Postal Service. An NCOA submission is an individual indicating to the USPS that they want mail sent to them at an address to be forwarded on to a new address. Catalist runs NCOA on its national file on a rolling, state-by-state schedule. This schedule is set in such a way that no state goes more than 90 days without being submitted for NCOA, processed, and re-released with newly updated NCOA data. Due to restrictions in the storage of NCOA data, these official NCOA indicators are dropped off of the database after 18 months.
19. Catalist's database also indicates whether persons on a state's official voter rolls are modeled to be "deadwood." The deadwood indicator identifies records that are probably deceased, no longer at the recorded address or otherwise not accurately recorded. The deadwood model uses the deceased and NCOA indicators described in the previous sections, in conjunction with other factors such as vote history and voter status collected from official voting rolls, to assign a deadwood category to all voter records on the Catalist file. This model is applied every time Catalist processes a voter file from a secretary of state. The deadwood model can be considered a modeled indicator, estimating the

likelihood that the person listed in the record is not a living, eligible voter, who resides in the listed address. The deadwood model is not purely cumulative of the deceased and NCOA flags.

20. Counsel for the Department of Justice provided Catalist with a database of Texas registered voters. There were 13,564,420 voter records in the file DOJ provided to Catalist.
21. Upon receipt of this file from the Department of Justice, Catalist took the following steps to match those records to our database of Texas registered voters: a) standardized the file format using address standardization and CASS correction;¹ b) removed malformed records;² c) applied NCOA processes as described above; d) geocoded the addresses for mapping to census geography; e) ran gender imputation logic where gender was missing on file; f) ran CPM race coding because race is not present in the official list of Texas registered voters maintained by the Texas Secretary of State; g) appended deceased flags as described above; h) appended official district and jurisdiction data; i) scored and appended the deadwood model described above.
22. Catalist provided the Department of Justice with information on those approximately 13.5 million Texas registered voters. This dataset included the race coding data and whether any of those voters are considered likely to be deceased, deadwood, or have a change of address NCOA flag.
23. 50.20% of the Texas voter records had a confidence level of “highly likely” for the race estimate, 22.52% were “likely,” 25.08% were “possibly” and 2.20% were uncoded.
24. 323,620 out of the approximately 13.5 million Texas voter records returned were marked by Catalist as deceased.
25. Out of the approximately 13.5 million Texas voter records returned, 236,429 were marked by Catalist as possible deadwood, 34,435 were marked as probable deadwood, and approximately 13.3 million were marked as not deadwood.
26. 882,113 out of the approximately 13.5 million Texas voter records returned were marked by Catalist with an NCOA flag.
27. The numbers reported in paragraphs 23 through 26 are not unusual for states in the Catalist database.

¹ CASS is an address certification system offered by the U.S. Postal Service that improves the accuracy of carrier route, 5-digit ZIP, ZIP + 4, and delivery point codes that appear on mail pieces.

² For example, records that were missing first or last name.

I declare under penalty of perjury that the foregoing is true and correct.
Executed this 27th day of June, 2014.



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- Conducted various (published and non-published) other analyses on public opinion and political behavior, leveraging survey, demographic, geographic, and large scale voter registration data.
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Ann Arbor, MI

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September 1999 – April 2003

SELECTED WRITING

- Ghitza, Yair, and Andrew Gelman. 2013. "Deep Interactions with MRP: Election Turnout and Voting Patterns Among Small Electoral Subgroups." *American Journal of Political Science* 57(3):762-776.
- Erikson, Robert and Yair Ghitza. 2012. "Setting the Agenda Setter." Prepared for 2012 Meeting of the American Political Science Association, New Orleans, LA. August 30-September 2, 2012.
- Ghitza, Yair. "Who's Going to Vote? Demographic Turnout Forecasting Using Pre-Election Polls." Working Paper.
- Erikson, Robert, Yair Ghitza, and Christopher Wlezien. 2010. "Differential Campaign Effects in Battleground and Non-Battleground States? An Analysis of Recent Presidential Elections." Presented at the Annual State Politics and Policy Conference, Springfield, Illinois, June 3-5, 2010.
- Gelman, Andrew, Daniel Lee, and Yair Ghitza. 2010. "Public Opinion on Health Care Reform." *The Forum* 8(1).
- Gelman, Andrew, Daniel Lee, and Yair Ghitza. 2010. "A Snapshot of the 2008 Election." *Statistics, Politics, and Policy* 1(1).
- Gelman, Andrew, Jonathan P. Kastellec, and Yair Ghitza. 2009. "Beautiful Political Data." In *Beautiful Data: The Stories Behind Elegant Data Solutions*. O'Reilly Media.
- Ghitza, Yair, and Todd Rogers. 2009. "Data Driven Politics". In *The Change We Need: What Britain Can Learn from Obama's Victory*. Ed. Nick Anstead and Will Straw. Fabian Society.
- Roy, Deb, Yair Ghitza, Jeff Bartelma, and Charlie Kehoe. 2004. "Visual Memory Augmentation: Using Eye Gaze as an Attention Filter." *Proceedings of the IEEE International Symposium on Wearable Computers*.

SELECTED WORK HISTORY

Catalist / Copernicus Analytics

Washington, DC

Senior Scientist / Consultant

August 2004 – Present

- Created and implemented large-scale statistical models and data visualization projects for national and dozens of state and Congressional campaigns.
- This "microtargeting" work predicted probability of candidate support, voter turnout, issue support, and financial donation on the individual level for hundreds of millions of registered voters.

MIT Media Lab, Cognitive Machines Group

Cambridge, MA

Visiting Research Assistant

July 2003 – May 2004

- Performed core research in artificial intelligence and computer vision.
- Designed "attention glasses," a wearable attention aid that augments visual search capability.
- Currently developing an interface that improves communication abilities of paralyzed patients.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs,

v.

RICK PERRY, *et al.*,

Defendants.

Civil Actions No. 2:13-cv-193 (NGR)

UNITED STATES OF AMERICA,

Plaintiff,

TEXAS LEAGUE OF YOUNG VOTERS
EDUCATION FUND, *et al.*,

Plaintiff-Intervenors,

TEXAS ASSOCIATION OF HISPANIC
COUNTY JUDGES AND COUNTY
COMMISSIONERS, *et al.*,

Plaintiff-Intervenors,

v.

STATE OF TEXAS, *et al.*,

Defendants.

Civil Action No. 2:13-cv-263 (NGR)

TEXAS STATE CONFERENCE OF NAACP
BRANCHES, *et al.*,

Plaintiffs,

v.

NANDITA BERRY, *et al.*,

Defendants.

Civil Action No. 2:13-cv-291 (NGR)

BELINDA ORTIZ, *et al.*,

Plaintiffs,

v.

STATE OF TEXAS, *et al.*,

Defendants

Civil Action No. 2:13-cv-348 (NGR)

UNITED STATES' NOTICE OF FILING OF
THE EXPERT REPORT OF DR. JANE HENRICI

At the Court's direction, the United States hereby files the expert report of Dr. Jane Henrici, which is attached hereto.

Date: June 27, 2014

KENNETH MAGIDSON
United States Attorney
Southern District of Texas

Respectfully submitted,

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Acting Assistant Attorney General
Civil Rights Division

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CERTIFICATE OF SERVICE

I hereby certify that on June 27, 2014, I served a true and correct copy of the foregoing via the Court's ECF system on the following counsel of record:

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Defendants

Civil Action No. 2:13-cv-348 (NGR)

DECLARATION OF JANE HENRICI

Pursuant to 28 U.S.C. § 1746, I, Jane Henrici, make the following declaration:

I. Statement of Inquiry

1. I have been asked by attorneys with the U.S. Department of Justice to present evidence from social science research to assist the court in determining whether low-income Texans face increased burdens when attempting to obtain photo identification as authorized by Senate Bill 14 (SB 14) and, because the majority of Texans living in poverty are black and Hispanic, whether low-income blacks and Hispanics are disproportionately burdened by this law. I have been compensated at \$200 per hour for my work, and have reviewed studies of poverty in Texas, some of which I authored or co-authored, and examined additional data, including from the U.S. Census, to assess circumstances faced by low-income members of racial and ethnic minorities in Texas.

2. I have reached the following conclusion: poorer Texans who are registered voters or eligible to register to vote but do not possess photo identification acceptable under SB 14 face multiple obstacles in obtaining such documentation relative to Texans with higher income levels. Poorer Texans who are black and Hispanic are more likely than those who are white to have unreliable incomes, live in relative social and economic isolation, have health problems that limit mobility, and face stigmas associated with their poverty—which compounds and worsens difficulties securing authorized photo identification in order to vote. The law disproportionately burdens low-income black and Hispanic Texans.

II. Background and Qualifications

3. I am an anthropologist with twenty years of professional field research, policy analysis, publication, and university level teaching experience. I am an Independent Consultant, Senior Research Affiliate with the Institute for Women's Policy Research, and Professorial Lecturer at George Washington University.

4. I specialize in issues of poverty as they affect gender, racial and ethnic groups, and those with special needs such as the elderly and those with disabilities. I focus in my research, teaching, and consulting on methods to improve opportunities and reduce obstacles that unequally affect various groups and communities. I have conducted and directed others in conducting quantitative and qualitative research in the United States, Latin America, and the Middle East and North Africa.

5. I obtained my doctorate in anthropology at The University of Texas at Austin in 1996, my Master's degree at the University of Chicago in 1981, and graduated with my Bachelor's from the University of Texas at Austin *Cum Laude* in 1979 with three semesters at Southern Methodist University 1976–1977.

6. After completing my doctoral dissertation field research in Peru, I was contracted as a qualitative ethnographic researcher on different projects to gather and analyze information concerning race, ethnicity, and experiences of poverty and marginalization in Texas. I conducted research for these projects in Laredo, Palestine, and various communities south of Austin.

7. After obtaining my doctorate, I was selected to be a Postdoctoral Research Fellow 1998–2000 at the University of Texas at Austin for "Welfare,

Children, and Families: A Three-City Study,” a large-scale, longitudinal, and mixed method research project on the consequences of welfare policy changes begun nationally in 1996 (in Texas, in 1995) on households, neighborhoods, and government and nonprofit agencies in Boston, Chicago, and San Antonio.

8. Subsequent to my fellowship, I was hired full-time as a research scientist on the project 2000-2001, and continued during the summers of 2002 and 2003 as a subcontractor. More about my work on this study is described in my CV, provided as an appendix to this report.

9. I taught for seven years in the Anthropology Department at the University of Memphis. In 2008, I left that teaching position to join the Institute of Women’s Policy Research, contracted to direct a long-term study of the ongoing conditions of 184 low-income African American women, former tenants of public housing, displaced by the flooding of New Orleans in the aftermath of Hurricane Katrina. We conducted interviews for this study in the womens’ homes post-Katrina in New Orleans and Baton Rouge, Louisiana and Houston, Texas.

10. Additional professional research and analysis experience in Texas that I have done includes qualitative projects dealing with food stamp use in rural and urban areas of central Texas and with minority math and science elementary school education in Laredo, Texas.

11. Policy changes I have studied in Texas include, but are not limited to, the adoption of weekly work hour and parenting class requirements along with 60-month/5 year lifetime limits for cash welfare receipt; the delinking of cash benefits from medical coverage; the imposition of sanctions on benefits recipients in the

form of cutting their child care subsidy, cash assistance, or food stamps for violations such as unreported asset ownership or missed meetings with caseworkers; the state-adopted gender-based violence waivers on work requirements; the mass reductions to professional benefits and employment caseworker staffing; the contracting of nonprofits for job training programming; and the demolitions of traditional public housing stock.

12. For all of these projects in Texas (1991-2013), I spent substantial interview and observation hours within the homes, recreational facilities, schools, stores, churches, child care centers, and social services benefits offices of the participating low-income families. In addition, I interviewed elementary school teachers in Laredo, and benefits caseworkers, religious leaders, political representatives, child care providers, and neighborhood organization administrators in San Antonio. For my research in Laredo, I lived with two families, for a period of three-months each (October - December 1991 and January - March 1992), in their homes located in the low-income Hispanic neighborhoods where our respondents were concentrated.

13. I have authored and co-authored reports and publications including books, book chapters, evaluations, and policy recommendations; prepared grant proposals and legislative, media, and other communication; served on doctoral, peer-publication, and grant proposal review committees; delivered invited academic and public lectures and consulted internationally and domestically on issues of disparity and development; and mentored students and junior researchers.

14. My edited volume, *Doing Without: Women and Work after Welfare Reform* (2006), and the book I co-authored with Ronald Angel and Laura Lein, *Poor Families in America's Health Care Crisis* (2006), have received honors and citations and application in university coursework. My recent publications include "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," (with Allison Suppan Helmuth and Angela Carlberg) in *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*.

15. I have received multiple awards and honors, including a Fulbright Scholar Award, and have been elected multiple times to international professional offices.

16. I am regularly asked to speak on and advise regarding ways to address issues of poverty and barriers confronted by lower-income individuals, particularly women of racial and ethnic minorities and those who have health and disability challenges.

17. I am considered an expert in qualitative methods and in the integrated use of quantitative and qualitative methods of research (generally known as a mixed method approach). I do technical consulting and training in both, and am the regular instructor for the graduate course for the Elliott School of International Affairs at George Washington University in mixed methods.

III. Sources of Information

18. For this report, I reviewed scholarly literature regarding the use of documents, including those necessary to obtain government services and benefits,

by low-income minority citizens and particularly those living in Texas. I also examined demographic data concerning minorities and poverty in Texas, and reviewed all interview data from the two large-scale longitudinal projects in which I have conducted research in Texas.

19. This mixed method approach to data collection and analysis has increasingly become regarded by policy experts as superior to either quantitative or qualitative alone for large-scale and in-depth examinations of lower income households and populations¹ as well as “street level” implementation of legislation and policy.² In particular, mixed method approaches are valued for assessing issues of poverty and economic development among diverse racial and ethnic groups.³

¹ Donna M. Mertens, Katrina L. Bledsoe, Martin Sullivan, and Amy Wilson. “Utilization of Mixed Methods for Transformative Purposes,” In Abbas Tashakkori and Charles Teddlie (eds.), *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, 2nd Edition, pp. 193 – 214 (Thousand Oaks, CA: SAGE Publications, 2010).

² Evelyn Z. Brodtkin. “Accountability in Street-Level Organizations,” *International Journal of Public Administration*. 31: 317 – 336 (2008).

³ Kathryn Edin and Laura Lein. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work* (New York, NY: Russell Sage Foundation, 1997); Frank Munger (ed.), *Laboring Below the Line: The New Ethnography of Poverty, Low-Wage Work, and Survival in the Global Economy* (New York, NY: Russell Sage Foundation, 2002); Steve Olson (ed.) *Toward an Integrated Science of Research on Families* (Washington, DC: Committee on the Science of Research on Families, Board on Children, Youth, and Families, Institute of Medicine and National Research Council of the National Academies, 2011); Susan J. Popkin, Laura E. Harris, and Mary K. Cunningham. *Families in Transition: A Qualitative Analysis of the MTO Experience, Final Report* (Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research and Abt Associates, Inc., 2002); Martín Sánchez-Jankowski. *Cracks in the Pavement: Social Change and Resilience in Poor Neighborhoods*. (Berkeley, CA: University of California Press, 2008); U.S. Department of Housing and Urban Development. “Mixed-Income Community Dynamics: Five Insights from Ethnography,” *Evidence Matters* (Spring, 2013); William Julius Wilson. *When Work Disappears: The World of the New Urban Poor* (New York, NY: Knopf

This preference for mixed methods research comes from a long history of evaluating social science focused on poverty, and efforts to address it.⁴ The principal reason for this preference is that, while survey data box in responses regarding human experiences, qualitative data open up explanations and provide in-depth information for those responses.⁵ Moreover, within analyses and reporting of qualitative data, descriptive accounts of individual human experiences and views in the form of vignettes are valid and standard components.⁶

20. I also reviewed for this report the texts of SB 14, the Texas Administrative Regulations related to Election Identification Certificates and the following websites of the Texas Secretary of State and Texas Department of Public Safety (DPS): www.votetexas.gov, www.txdps.state.tx.us/DriverLicense, and <http://www.txdps.state.tx.us/driverlicense/electionid.htm> as well as the version in Spanish of this last site, available through a link to an automatically generated Google translation.⁷ In addition, I reviewed the expert report of Dr. Steven

Doubleday Publishing Group, 1996) and *More than Just Race: Being Black and Poor in the Inner City* (New York, NY: W.W. Norton and Company, 2010).

⁴ Alice O'Connor. *Poverty Knowledge: Social Science, Social Policy, and the Poor in Twentieth-Century U.S. History* (Princeton, NJ: Princeton University Press, 2001).

⁵ Donna M. Mertens, Katrina L. Bledsoe, Martin Sullivan, and Amy Wilson. "Utilization of Mixed Methods for Transformative Purposes," In Abbas Tashakkori and Charles Teddlie (eds.), *SAGE Handbook of Mixed Methods in Social & Behavioral Research, 2nd Edition*, pp. 193 – 214 (Thousand Oaks, CA: SAGE Publications, 2010).

⁶ Margaret D. LeCompte and Jean J. Schensul. *Analysis and Interpretation of Ethnographic Data: A Mixed Methods Approach, 2nd Edition*, pp. 269 - 275 (Lanham, MD: AltaMira Press, 2013).

⁷

<http://translate.google.com/translate?depth=1&hl=en&rurl=translate.google.com&>

Ansolabehere on the number and racial make-up of Texas voters who lack state or federal photo identification.

21. SB 14 requires that a voter in Texas present one of seven forms of government-issued photo identification for verification at a polling station before being allowed to vote on site. The government-issued photo documentation, other than a citizenship certificate, must be current or have expired within 60 days of being presented. If voting by mail, no photo identification is required.

22. The Texas Secretary of State website lists the seven acceptable forms of photo identification. If a currently registered voter in Texas lacks all seven valid forms of photo identification, and has not obtained a disability exemption, the voter can cast a provisional ballot. For such a provisional ballot to be counted a voter must show one of the required forms of photo identification to the county registrar within six calendar days of the election, except in circumstances that involve voters who have religious objections to being photographed or who lost their identification as a result of a natural disaster.

23. To obtain a disability exemption/exception, adult voters (or their legal guardians) must supply written documentation from either the U.S. Social Security Administration or the U.S. Department of Veteran's Affairs confirming the disability determination and, for veterans, at least 50 percent impairment, along with a statement that the voter lacks any one of the allowable government-issued photo identifications.

[sl=en&tl=es&twu=1&u=http://www.txdps.state.tx.us/DriverLicense/electionID.htm](http://www.txdps.state.tx.us/DriverLicense/electionID.htm).

24. In order to vote by mail, and thus not be required to show an authorized photo identification, a voter must be 65 years or older, disabled, out of the county on election day and during the period of early voting, or confined in jail but otherwise eligible. In addition, the person must submit to the proper early voting clerk a completed and signed application between the 60th to 9th day, or 11th if election day falls on a Tuesday, before election day or deliver the application before early voting in person begins.

25. Those who otherwise lack one of the specified forms of photo identification may apply for a Texas Election Identification Certificate (EIC) that, if issued, will be valid for six years (although EICs for citizens 70 years old and over do not expire). An EIC may be used only for voting, and can be issued through submission of an application and supporting documents at a DPS office, an EIC Mobile Station, or a designated county office in select counties that do not contain a DPS office. To get an EIC, a person needs to 1) go to the appropriate office during open hours, 2) complete and verify the application form (DL-14C) affirming that s/he lacks all other forms of qualifying identification under SB 14, 3) submit documentation as listed below, 4) have the application form notarized or signed by an authorized officer of the State of Texas, and 5) have a photograph taken.

26. According to the Texas Secretary of State website, an applicant must show a current voter registration card or be eligible to vote and submit a voter registration application. Moreover, according to the DPS website, EIC applicants must show documentary proof of U.S. citizenship and of identity.

27. According to the DPS website, proof of citizenship for obtaining an EIC requires an (expired) U.S. passport book or card; an original or certified birth certificate from a U.S. state, territory, or District of Columbia or authorized Report of Birth issued by the U.S. Department of State; a Citizen or Citizen Resident Identification Card issued by the U.S. Department of Justice Immigration and Naturalization Service;⁸ or a certificate of U.S. citizenship or naturalization.⁹

28. Proof of identity documentation for an EIC must be: one piece of “primary” identification; two “secondary” pieces of identification; or one secondary plus two “supporting” pieces of identification. Primary identification must be either a Texas driver license or an authorized personal identification card expired for over 60 days and within two years. Secondary identification has to be a federal, state, U.S. territory, or the District of Columbia government-issued and recorded original or certified copy of: a birth certificate, court order with name and date of birth showing official name and/or gender change, or U.S. citizenship or naturalization papers without photo identification. Supporting pieces include, but are not limited to, a voter registration card; school or military record; a U.S. Social Security Card; Form W-2 or 1099; Medicaid or Medicare card; parole or mandatory release certificate or offender identification card issued by the Texas Department of Criminal Justice; Texas driver license or personal identification expired more than two years; and an

⁸ U.S. Citizen and Resident Citizen ID cards, Forms I-197 and I-179 respectively, remain valid although are no longer issued.

⁹ These certificates are issued by the U.S. Department of Homeland Security Citizenship and Immigration Services.

unexpired or expired within two years driver license from another U.S. state, territory, or District of Columbia.

29. In other words, to secure and use an EIC, a person must first register to vote, take the time to learn what is required and gather or obtain copies of the necessary documentation, find a way to get to a location where EICs are being issued during the hours that the office is open, wait at that location for whatever time necessary in order to be served, complete and verify the EIC application, and bring the EIC at the time of voting.

30. Large numbers of low-income black and Hispanic Texans are able to get by in their daily lives without photo identification. Research performed by Dr. Steven Ansolabehere for this litigation found that approximately 1.2 million registered voters in Texas lack an accepted form of federal or state photo identification as required by SB 14, and black and Hispanic voters are more likely to lack photo identification than white voters. According to Dr. Ansolabehere's report, black voters are roughly twice as likely as non-Hispanic white voters to lack authorized photo identification, and Hispanic voters are significantly more likely to lack photo identification as well.

31. As I will describe, low-income Texans experience difficulties obtaining, keeping, replacing, and renewing government-issued documents such as vouchers, certificates, licenses, records, and cards—and the majority of low-income Texans are black and Hispanic. As Dr. Ansolabehere's research shows, black and Hispanic Texans are more likely to not already have a current and, as authorized by SB 14, appropriate form of photo identification. Low-income Texan voters who do

not already have photo identification as required by SB 14 will find getting one to be a burden, and this is a burden that disproportionately impacts minorities in Texas.

IV. Poverty, Race and Ethnicity, and Photo Identification in Texas

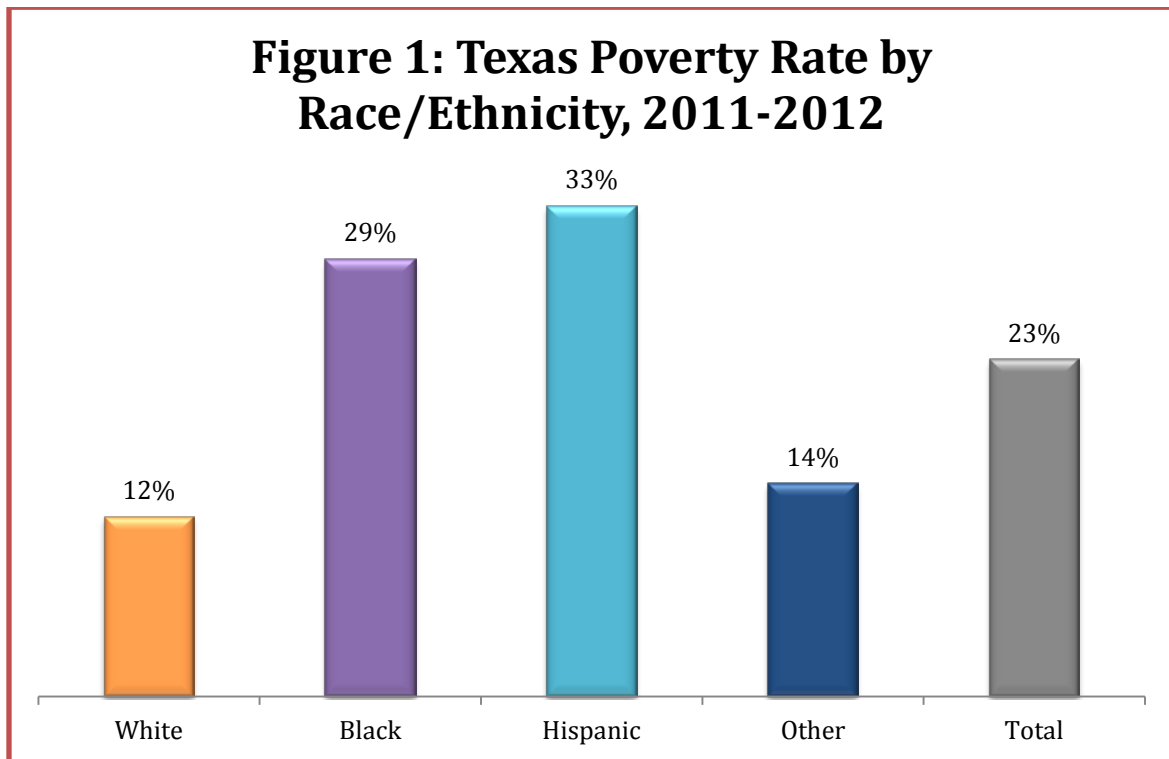
32. Poorer Texans will have significant difficulty getting photo identification if they do not have one already, and blacks and Hispanics are disproportionately represented among Texans living in poverty. In Texas, poverty is strongly associated with race and ethnicity, and conditions in which poorer minorities live and work in Texas affect their ability to obtain and update government-issued forms of documentation.

33. Further, as I will describe in the following sections, poorer blacks and Hispanics are more likely than other Texans to have unreliable incomes, live in relative social and economic isolation, have health issues that limit mobility, and face stigmas associated with their poverty. These problems interact with one another and make getting and keeping current photo identification as authorized by SB 14 a burden for poorer African-American and Hispanic Texans not already in possession of one.

34. According to a 2014 analysis¹⁰ of the most recent income levels from the U.S. Census Bureau Current Population Survey for Texas (2011-2012), roughly one-fourth (23 percent) of the state population lives at and below 100 percent of the Federal Poverty Level, as defined by the U.S. Department of Health and Human Services. This poverty is spread unevenly across Texas among those of different race

¹⁰ The Kaiser Family Foundation. *State Health Facts* (2014).
<http://kff.org/statedata/>.

and ethnic groups. Using the U.S. Census categories for race and ethnic groups, the percentage of whites (12 percent) who live in poverty is less than half that of blacks (29 percent) or Hispanics of any race (33 percent) in Texas. In contrast, the percentage of all other races and ethnic groups in Texas who live at that level of poverty (14 percent) is closer to that of whites (Figure 1).



Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2012 and 2013 Current Population Survey (Annual Social and Economic Supplements).

Unreliable Income Burdens

35. Among Texans in poverty, income is not only low, but unreliable. The lack of a consistent and reliable income affects the decisions that poorer blacks and

Hispanics, the majority of poorer Texans, must make regarding their time expenditure, transportation use, residential location, and health care.

36. Most of the job opportunities that poorer Texans can find pay relatively low hourly wages and have few if any accompanying benefits. To earn an income sufficient to shelter and feed an adult, much less a family, even in less expensive parts of Texas often requires multiple jobs. In addition, many jobs are only part-time or temporary, sometimes seasonal, and lack the option for the employee to have a regular schedule: these conditions also make income unsteady.¹¹ Multiple jobs combined with irregular hours of employment make planning for appointments or meetings outside of work, particularly during open office hours, problematic¹²—and that will include the scheduling necessary to obtain photo identification authorized by SB 14.

¹¹ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 101 – 128 (New York: Cambridge University Press, 2006); Beth Bruinsma. “Flexible Families: Low-Income Women Negotiating Employment Opportunities, Wages, and Child Care Needs in San Antonio,” in Jane Henrici (ed.) *Doing Without: Women and Work after Welfare Reform*, pp. 40 – 63 (Tucson, AZ: University of Arizona, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. “Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina,” in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012); Jane Henrici and E. Carol Miller. “Work First, Then What? Women and Job Training after Welfare Reform,” in Jane Henrici (ed.) *Doing Without: Women and Work after Welfare Reform*, pp. 64 – 80 (Tucson, AZ: University of Arizona, 2006); Deanna Schexnayder et al. *Texas Families in Transition/Surviving without TANF: An Analysis of Families Diverted from or Leaving TANF*, pp. 67, 91, and 109 (Austin, TX: Ray Marshall Center for the Study of Human Resources, the University of Texas at Austin and the Center for Innovative Projects for Economic Development, Prairie View A&M University, 2002).

¹² Holly Bell. “Putting Mothers to Work: Caseworkers’ Perceptions of Low-Income Women’s Roles in the Context of Welfare Reform,” in Jane Henrici (ed.), *Doing*

37. Moreover, as a result of their unreliable incomes, low-income Texans do not always have access to credit and to formal financial services such as checking accounts. Relying on cash loans through friends and family and check cashing through local stores increases income instability. At the same time, relying on such transactions can allow those Texans to get by without the forms of photo identification that regular banking might demand—and that SB 14 requires.¹³

38. Finally, unreliable and irregular wage work and other income also affect the cost of taking the time to locate and bring the requisite papers and identity cards, travel to a processing site, wait through the assessment, and get photo identification. This is because most job opportunities do not include paid sick or other paid leave; taking off from work means lost income. Employed low-income Texans not already in possession of such documents will struggle to afford income loss from the unpaid time needed to get photo identification.

39. In fact, the time expenditure needed for obtaining a record or form of identification can be of questionable benefit and significant risk to a low-income person in Texas, unless that expenditure is clearly aimed toward the betterment of a child. While low-income women and men living in Texas will add, sometimes significantly, to their own hardships and risks in their effort to cover costs that could help their children, poorer minority adults are often reluctant to invest time

Without: Women and Work after Welfare Reform, pp. 155 – 171 (Tucson, AZ: University of Arizona, 2006).

¹³ Laura Lein, Alan Benjamin, Monica McManus, and Kevin Roy. “Without a Net, Without a Job: What’s a Mother to Do?,” in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 23 - 39 (Tucson, AZ: University of Arizona, 2006).

and other resources into tasks not directly related to that sort of outcome or objective.¹⁴

Isolation Burdens

40. Related to their unreliable incomes, poorer Texans face troubles both in getting around and in finding a place to stay. Social and physical isolation related to transportation and housing issues interact with other problems to present a barrier that low-income black and Hispanic Texans in particular face in securing photo identification acceptable under SB 14.

41. The majority of the blacks and Hispanics living in poverty about whom I have conducted research across Texas either walk and, where buses are available, take a bus or series of buses to get around. Most respondents are not car owners; those who own vehicles often own ones that fail to run reliably.¹⁵ Thus, poorer minority Texans might not need to possess or renew a Texas driver license

¹⁴ Beth Bruinsma. "Flexible Families: Low-Income Women Negotiating Employment Opportunities, Wages, and Child Care Needs in San Antonio," in Jane Henrici (ed.) *Doing Without: Women and Work after Welfare Reform*, pp. 40 – 63 (Tucson, AZ: University of Arizona, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012); Debra Skinner, William Lachicotte, and Linda Burton. "The Difference Disability Makes: Managing Childhood Disability, Poverty, and Work," in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 113 – 130 (Tucson, AZ: University of Arizona, 2006).

¹⁵ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 79 – 100 (New York: Cambridge University Press, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

and, as will be discussed below, face mobility and other challenges that affect getting an EIC.

42. Low-income Texans give several reasons for either not owning a vehicle or keeping one in working order. Based on our research with primarily black and Hispanic poorer families in San Antonio, my co-authors and I observe that, “Ownership of a car often represents a burden as much as a useful asset.”¹⁶ Reasons include: 1) unless an auto is given to them or the resources for it provided, households in poverty lack the money to purchase, maintain, and insure a car;¹⁷ and 2) poorer black or Hispanic Texans are disproportionately likely, even relative to other poorer Texans, to have grown up in or near a traditional-style public housing development that was within walking distance of services, schools, stores, and buses or collective transit. These families learned to survive without owning a car.¹⁸

43. A study of overall transportation expenditures among poor in the United States based on research in California found that low-income families often employ complicated strategies in order to afford even minimal mobility. These

¹⁶ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, p. 96 (New York: Cambridge University Press, 2006).

¹⁷ Laura Lein, Alan Benjamin, Monica McManus, and Kevin Roy. “Without a Net, Without a Job: What’s a Mother to Do?” in Jane Henrici (ed.) *Doing Without: Women and Work after Welfare Reform*, pp. 23 – 39 (Tucson, AZ: University of Arizona, 2006).

¹⁸ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 139 – 146 (New York: Cambridge University Press, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. “Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina,” in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

adaptations can include deliberately limiting travel to shorter distances and less frequent trips. However, even after doing their best to strategize, poorer households still sometimes have to sacrifice other critical items in their budget—including food—in order to cover transportation costs.¹⁹

44. Some Texan families also forgo vehicle ownership to avoid undercutting access to means-tested benefits. Many low-income Texans worry they might need to use supplemental assistance in the future, even if they have not used it in the past, whether this means subsidized child care, food stamps, subsidized health coverage, or temporary cash welfare (which, in order to obtain, requires demonstrating at least part-time work). Texans living in poverty might go through phases of receiving and not receiving benefits depending on other circumstances in their lives, such as employment and health. A study of both survey and state administrative data concerning low-income Texans shows, however, that the effort required to seek out and obtain such help in Texas can be discouraging. Black and Hispanic Texans in particular tend to seek cash welfare only in a situation of unemployment. (Conversely, when employed, black and Hispanic low-income Texans are more likely than low-income white Texans to leave the welfare rolls.)²⁰

¹⁹ Asha Weinstein Agrawal et al. *Getting Around When You're Just Getting By: The Travel Behavior and Transportation Expenditures of Low-Income Adults*, MTI Report 10-02 (San José, CA: Mineta Transportation Institute, San José State University, 2011).

²⁰ Deanna Schexnayder et al. *Texas Families in Transition/Surviving without TANF: An Analysis of Families Diverted from or Leaving TANF*, pp. 91 and 109 (Austin, TX: Ray Marshall Center for the Study of Human Resources, the University of Texas at Austin and the Center for Innovative Projects for Economic Development, Prairie View A&M University, 2002).

One of the stipulations for determining eligibility to receive certain types of supplemental assistance is asset ownership; as a result, some poorer Texans concerned about seeking help at some point,²¹ such as through Medicaid,²² do not own a car.

45. In other words, because of unreliable income burdens, and the problems and costs associated with car ownership, there are poorer black and Hispanic Texans who are getting by without owning a vehicle.²³

46. At the same time, while a portion of poorer minority Texans are getting by without a car, doing so is difficult and itself an obstacle to improving their lives. Public transit in Texas is not an adequate substitute for private vehicle ownership,²⁴ and lack of reliable transportation affects poorer Texans' employment

²¹ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, p. 96 (New York: Cambridge University Press, 2006); Jane Henrici, Allison S. Helmuth, Frances Zlotnick, and Jeff Hayes. *Women in Poverty During the Great Recession: Public Benefits Do Not Always Respond to Rising Need, Variation Across States is Substantial*, p. 2 (Washington, DC: Institute for Women's Policy Research, 2010).

²² Although Texas does not require families to provide proof of assets when determining children's eligibility for Medicaid or the Children's Health Insurance Program (CHIP), the state may do so for adults in a household without a dependent, disabled, or elderly member. ("Texas Medicaid and CHIP Programs," Georgetown University Health Policy Institute Center for Children and Families," <http://ccf.georgetown.edu/programs/tx-mcp/>).

²³ Deanna Schexnayder et al. *Texas Families in Transition/Surviving without TANF: An Analysis of Families Diverted from or Leaving TANF*, p. 57 (Austin, TX: Ray Marshall Center for the Study of Human Resources, the University of Texas at Austin and the Center for Innovative Projects for Economic Development, Prairie View A&M University, 2002).

²⁴ Cf. Tricia Ann Barrow. "An Examination of Urban Public Transportation Equity in San Antonio, Texas," M.S. Report (Austin, TX: Department of Community and Regional Planning, the University of Texas at Austin, 2009).

opportunities and thus their already unsteady incomes. In the statewide study of poorer Texans mentioned earlier, respondents reported “transportation problems” as the second most common reason after “child care problems” for not having a job. Over two-thirds (68 percent) of respondents who had left welfare but remained unemployed said they lacked fully reliable transportation. Further, the issue varies by race and ethnicity among poorer Texans: white unemployed respondents were more likely to have use of a private and reliable vehicle than either Hispanics or blacks, while blacks were far more likely to suffer unemployment because of a lack of transportation than Hispanics or whites.²⁵

47. Relying on others who own cars for rides to centers where authorized photo identification can be made might not be an option either. Geographic distances in rural and small-town Texas form one obstacle, yet distances in urban areas of Texas can pose a problem as well. In part as a result of housing reform policy and the demolition of the preponderance of public housing during the mid-1990s-2000s, a portion of poorer families making use of housing assistance have been scattered across Texas cities.²⁶ In addition, when unable to make regular rent and utility payments due to irregular employment and limited access to credit or loans, poorer Texans often abruptly relocate or experience eviction without warning

²⁵ *Ibid.* pp. 56 – 60.

²⁶ Bruce Katz. “The Origins of HOPE VI,” In *From Despair to HOPE: HOPE VI and the New Promise of Public Housing in America’s Cities*, Henry G. Cisneros and Lora Engdahl (eds.), pp. 15 – 30 (Washington, DC: Brookings Institution Press, 2009); Lillian M. Salcido. “Looking for Home,” in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 83 – 98 (Tucson, AZ: University of Arizona, 2006).

and get cut off from telephone and internet communication with others.²⁷ Many low-income Hispanic and black families in particular have moved out of or been displaced from their former neighborhoods. As I found in my research, changes and challenges to housing and communication among low-income minorities across Texas mean that members of extended families often no longer are able to remain near one another and help one another out (whether with transportation, shelter, child care, or loans).²⁸

48. Lack of reliable employment, housing, transportation, and assistance with these resources from either informal or formal systems create another aspect of social and economic isolation that especially affects poorer minority Texans who do not own cars: affording the necessary time to deal with issues that arise in daily life. Across much of Texas, either walking or taking a bus can cost hours in travel time to go to and from a child care center, work site, school registrar's office, employment office, doctor's office, or government agency—whether as part of a

²⁷ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 10 – 12 (New York: Cambridge University Press, 2006).

²⁸ *Ibid.* p. 6; Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012); Lillian M. Salcido. "Looking for Home," in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 83 – 98 (Tucson, AZ: University of Arizona, 2006).

daily routine or to obtain the documents necessary to acquire photo identification as authorized by SB 14.²⁹

49. Income and financial conditions interact with relative geographic and social isolation and impede access to government-issued documents including an EIC. Minority Texans living in poverty who are managing to get by without photo identification are significantly burdened by the requirement to obtain one in order to vote in person.

Health Burdens

50. Meanwhile, health issues interact with race and ethnicity, poverty, transportation, and housing in Texas to create additional mobility impediments to the ability to obtain and renew photo identification. Compared with non-Hispanic white adults in Texas, minority individuals, particularly those who are low-income, experience higher levels of health impairment.³⁰

51. Poorer minority Texans also disproportionately struggle with managing personal or family member disabilities.³¹ At the same time, obtaining

²⁹ Holly Bell. "Putting Mothers to Work: Caseworkers' Perceptions of Low-Income Women's Roles in the Context of Welfare Reform," in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 155 – 171 (Tucson, AZ: University of Arizona, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

³⁰ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 79 – 100 (New York: Cambridge University Press, 2006).

³¹ Deanna Schexnayder et al. *Texas Families in Transition/Surviving without TANF: An Analysis of Families Diverted from or Leaving TANF*, p. 58 (Austin, TX: Ray

federal disability status, which can result in a person being eligible for a higher level of cash assistance than most other social benefits, is an onerous process that typically requires professional legal assistance;³² indeed, research finds that a larger portion of poorer Texans have disabilities than the numbers documented by government agencies.³³ Research also shows a cyclic problem: a disability can restrict low-income minority Texans from taking the steps necessary to obtain and hold onto documents crucial for other benefits that could assist these individuals, such as housing vouchers or child care subsidies;³⁴ analogously, getting the paperwork and going through the process needed for an EIC would present similar difficulties.

Marshall Center for the Study of Human Resources, the University of Texas at Austin and the Center for Innovative Projects for Economic Development, Prairie View A&M University, 2002); Debra Skinner, William Lachicotte, and Linda Burton. "The Difference Disability Makes: Managing Childhood Disability, Poverty, and Work," in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 113 – 130 (Tucson, AZ: University of Arizona, 2006).

³² Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, p. 144 (New York: Cambridge University Press, 2006).

³³ Deanna Schexnayder et al. *Texas Families in Transition/Surviving without TANF: An Analysis of Families Diverted from or Leaving TANF*, p. 58 - 60 (Austin, TX: Ray Marshall Center for the Study of Human Resources, the University of Texas at Austin and the Center for Innovative Projects for Economic Development, Prairie View A&M University, 2002).

³⁴ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 164 – 165 (New York: Cambridge University Press, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

52. Older age can also affect mobility and relative isolation.

Transportation barriers and residential distances—to hospitals and clinics for care and government agencies to obtain health care coverage—worsen health among low-income minority Texans, and existing health, disability, and possible age-related problems further limit their abilities to get to and from sites for photo and other types of documentation.³⁵

Stigma Burdens

53. In the United States, in some public discourse, poverty and seeking assistance to mitigate it have become associated in particular with individuals who are black and Hispanic. Stigmas regarding presumed usage of social benefits and other government programs, and the awareness among low-income people of color of such stigmas and prejudices, further discourage low-income minority individuals in Texas from seeking out—or getting even when eligible—new documentation or replacing that which has been lost, destroyed (by fire or flood for example), or stolen.³⁶ Such stigmas and prejudices combine with the issues discussed above to add obstacles at every phase of getting, renewing, and using documents for those who are low-income Texans.³⁷ Intentional or not, negative attitudes and resulting

³⁵ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, p. 97 (New York: Cambridge University Press, 2006).

³⁶ Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

³⁷ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 25 – 26, 149 – 153 (New York: Cambridge University Press, 2006); Holly Bell. "Putting Mothers to Work: Caseworkers'

behaviors toward individuals because of their race and ethnic group identity form yet another obstacle for low-income minority Texans to obtaining, and keeping current, identification and other documents, whether housing vouchers, birth certificates, medical cards, school records, or an EIC.

54. Intentional interference or merely distraction can discourage poorer minority Texans from completing the steps to obtaining documents.³⁸ Such hindrances can arise with the staff or volunteers tasked with determining eligibility, processing the paperwork to gain records and documentations, or putting into use various certificates and records. Despite the many service providers across Texas who do not respond to stigmas or show racial prejudices,³⁹ and the policymakers and providers who find ways to ease rather than impede access to documentation

Perceptions of Low-Income Women's Roles in the Context of Welfare Reform," in Jane Henrici (ed.), *Doing Without: Women and Work after Welfare Reform*, pp. 155 – 171 (Tucson, AZ: University of Arizona, 2006); Alexandra Filindra. "Immigrant Social Policy in the American States: Race Politics and State TANF and Medicaid Eligibility Rules for Legal Permanent Residents," *State Politics and Policy Quarterly* 13(1): 26 – 48 (2012); Lynn M. Hempel, Julie A. Dowling, Jason D. Boardman and Christopher G. Ellison. "Racial Threat and White Opposition to Bilingual Education in Texas," *Hispanic Journal of Behavior Sciences* 35(1): 85 – 102 (2012).

³⁸ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 25 – 26, 149 – 153 (New York: Cambridge University Press, 2006); Jane Henrici. "Agents of Change: Nonprofit Organization Workers following Welfare Reform," In *Doing Without: Women and Work after Welfare Reform*, pp. 172 – 189 (Tucson, AZ: University of Arizona, 2006); Jane Henrici, Allison Suppan Helmuth and Angela Carlberg. "Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina," in Emmanuel David and Elaine Enarson (eds.), *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, pp. 142 – 154 (Nashville, TN: Vanderbilt University, 2012).

³⁹ Holly Bell. "Case Management with Displaced Survivors of Hurricane Katrina: A Case Study of One Host Community," *Journal of Social Service Research* 34 (3): 15 – 27 (2008).

and thus to opportunities, rights, services, and benefits,⁴⁰ problems continue.

Studies going back to at least 1983 confirm that, when tasked with implementing anti-fraud restrictions, service providers respond by seeking to avoid “errors of liberality;”⁴¹ in Texas, poll workers and those issuing EICs might be expected to feel these same pressures.⁴²

⁴⁰ A new documentation requirement, for citizenship, was added on to Medicaid and Children’s Health Insurance (CHIP) programs in 2006; the documentation requirement created so many difficulties for families and administrators that it was found to cause enrollment in health coverage to go down (Benjamin D. Sommers. “Targeting in Medicaid: The Costs and Enrollment Effects of Medicaid’s Citizenship Documentation Requirement,” *Journal of Public Economics*, 94: 174 – 182; U.S. Government Accountability Office [GAO]. *Medicaid: States Reported That Citizenship Documentation Requirement Resulted in Enrollment Declines for Eligible Citizens and Posed Administrative Burdens*. Report to Congressional Requesters, 07-889 [Washington, DC: GAO, 2007]). In 2009, Federal CHIP reform (CHIPRA) addressed the problem and allowed states to match data between Medicaid-CHIP and other public benefits programs (Donna Cohen Ross. *New Citizenship Documentation Option for Medicaid and CHIP Is Up and Running: Data Matches with Social Security Administration Are Easing Burdens on Families and States* [Washington, DC: Center on Budget and Policy Priorities, 2010]). However, Texas opts not to participate in this data matching that reportedly expedites documentation (“Texas Medicaid and CHIP Programs,” Georgetown University Health Policy Institute Center for Children and Families,” <http://ccf.georgetown.edu/programs/tx-mcp/>) and thus presumably continues to have a documentation requirement that impedes enrollment.

⁴¹ Evelyn Brodtkin and Michael Lipsky. “Quality Control in AFDC as an Administrative Strategy,” *Social Service Review*. 57 (1): 1 – 34 (1983).

⁴² Michael Alvarez and Thad E. Hall. “Controlling Democracy: The Principal-Agent Problems in Election Administration,” *Policy Studies Journal*. 34 (4): 491 – 510 (2006); Lonna Rae Atkeson, Lisa Ann Bryant, Thad E. Hall, Kyle L. Saunders, R. Michael Alvarez. “A New Barrier to Participation: Heterogeneous Application of Voter Identification Policies,” *Electoral Studies*. 29: 66 – 73 (2010); Thad E. Hall, J. Quin Monson, and Kelly D. Patterson. The Human Dimension of Elections: How Poll Workers Shape Public Confidence in Elections. *Political Research Quarterly*. 62 (3): 507 – 522 (2009); Jason H.T. Karlawish et al. “Identifying the Barriers and Challenges to Voting by Residents in Nursing Homes and Assisted Living Settings,” *Journal of Aging & Social Policy*, 20 (1): 65 – 79 (2008); Antony Page and Michael J. Pitts. “Poll Workers, Election Administration, and the Problem of Implicit Bias,” *Michigan Journal of Race & Law*, 15 (1): 1 – 56 (2009); Gillian E. Piner and Michael D.

55. Relevant racial and ethnic stigmas and prejudices persist, despite the fact that Texas is now a “minority-majority” state.⁴³ That is, as U.S. Census data from 2012 (Figure 2) shows, the percentage of non-white populations in Texas (55.5 percent) is now greater than that of non-Hispanic white Texans (44.5 percent).

Byrne. “The Experience of Accessible Voting: Results of a Survey among Legally-Blind Users [in Houston].” In *Proceedings of the Human Factors and Ergonomics Society 55th Annual Meeting*, 1686 – 1690 (2011)
<http://chil.rice.edu/research/pdf/PinerByrneHFES11.pdf>.

⁴³ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America’s Health Care Crisis: How the Other Half Pays*, pp. 25 – 26, 149 – 153 (New York: Cambridge University Press, 2006); Jane Henrici. “Agents of Change: Nonprofit Organization Workers following Welfare Reform,” In *Doing Without: Women and Work after Welfare Reform*, pp. 172 – 189 (Tucson, AZ: University of Arizona, 2006).

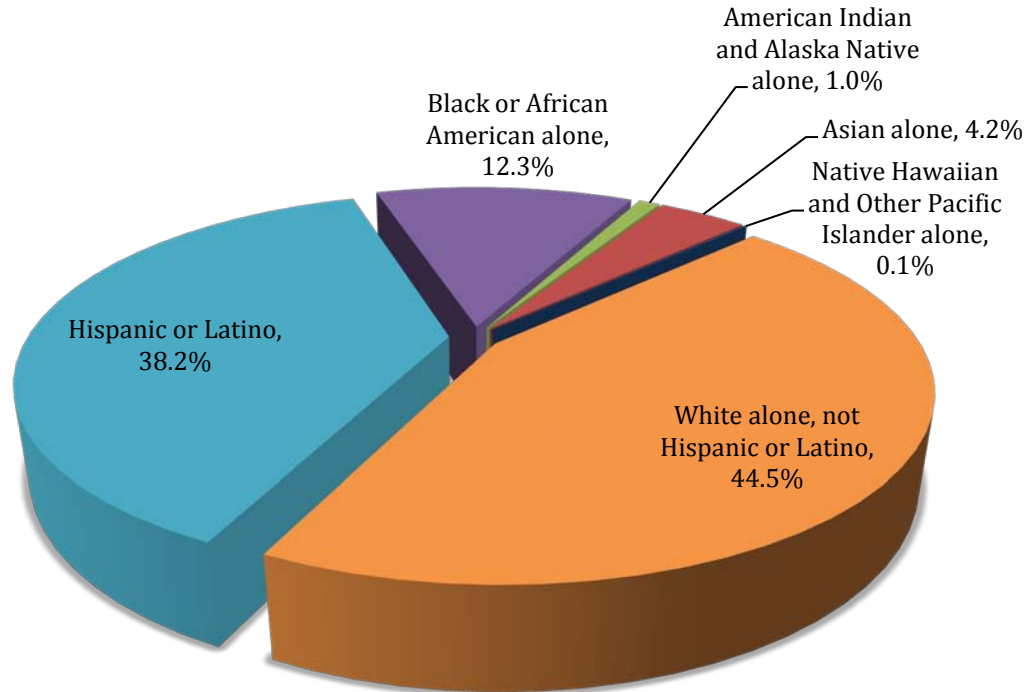


Figure 2: Texas Population by Race or Ethnic Group, 2012

Source: U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2012 American Community Survey, 1-Year Estimates

56. Low-income minorities struggle more than their fellow Texans with the need to care for their families, stay employed, afford transportation, and deal with health problems all while confronting stigmas about poverty and racial identity. These same factors inhibit their ability to renew any photo documentation they might have let expire or obtain new documentation⁴⁴—even one that does not

⁴⁴ Ronald Angel, Laura Lein, and Jane Henrici. *Poor Families in America's Health Care Crisis: How the Other Half Pays*, pp. 161 – 167 (New York: Cambridge University Press, 2006).

have a direct fee associated with its issuance such as the EIC—if they want to vote in person.

V. Conclusion

57. SB 14 demands that Texans who do not have an updated form of specified photo identification and who wish to vote in person must obtain one in order to vote. SB 14 requires these Texans—but not other registered voters—to spend additional time and resources that poorer minority Texans are unable to afford to submit paperwork to prove eligibility and obtain such documentation. Unless a document is intended to help a child, or might serve to directly increase income, reduce debt, or save on spending, low-income black and Hispanics in Texas encounter more disadvantages and discouragements than advantages or assistance with obtaining the paperwork needed for photo identification and obtaining that photo identification itself.

58. At the same time, not having documentation can lead to other obstacles for individuals and households.⁴⁵ Minority Texans who do not have appropriate records on hand—to prove eligibility for a subsidy, school credit, parole status, child custody, or work hours completed, for example—face stigmas and difficulties that interact and multiply. As another researcher has described it, it can

⁴⁵ Amanda Tillotson and Laura Lein. *Lack of Identification and Associated Difficulties: Results from Study of Austin Panhandlers* (unpublished report, authors' communication, 2014)

“take ID to get ID”⁴⁶ and this, along with the configuration of obstacles that low-income Texan minorities face, can seem insurmountable. Taken together, multiple impediments disproportionately affect low-income Texans of racial and ethnic minorities in their efforts to obtain, renew, and maintain photo identification in order to vote.

59. Poorer minorities in Texas face some combination of the following in order to obtain photo identification and preserve their right to vote: 1) potential loss of wages, on an already unreliable low income, from unpaid time off work; 2) difficulties with transportation and relative social and economic isolation; 3) health, age-related impediments and possibly disability problems; and 4) requirement to safely transport original documents or new ones and prevent their loss through theft, accident, or mistakes on the part of others, including service providers and eligibility caseworkers. Many poor Texan voters, disproportionately minority, will postpone or forego the challenge of obtaining the necessary photo identification since it is of little immediate benefit to their lives or those of their family members. The law demands that Texan voters present photo identification to vote in person. Low-income minority voters, who already experience difficulties with documentation in general and who are less likely to already have the photo documentation required by SB 14 in particular, will face significant obstacles to procure the documentation required by SB 14.

⁴⁶ Amy Blank Wilson. “It Takes ID to Get ID: The New Identity Politics in Services,” *Social Service Review* 83 (1): 111 – 132 (2009)

60. Based on this review of the literature, policies, and data, I conclude that poorer Texans of racial and ethnic minorities who do not already possess an acceptable and current form of photo identification disproportionately face burdens under SB 14 in obtaining one.

I declare under penalty of perjury that the aforementioned is true and correct to the best of my knowledge.

Executed this 27th day of June 2014.

A handwritten signature in blue ink that reads "Jane Henric". The signature is written in a cursive style with a long horizontal line extending from the start of the name.

VI. Appendix: Curriculum Vitae

JANEM. HENRICI, PH.D.
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EDUCATION

Ph.D. University of Texas at Austin, Anthropology, 1996
M.A. University of Chicago, 1981
B.A. University of Texas at Austin, *Cum Laude*, 1979
Southern Methodist University, 1976–77

CORE COMPETENCIES

Twenty years research experience including eight years managing large-scale projects, with excellent data analysis and report writing skills

Field experience at national, community, and organizational levels within developing nations and across the United States

Accomplished public speaker for U.S. and international panel discussions on poverty, race and ethnicity, gender, health, trade, development, and disaster

Fluent in Spanish, at professional level

SELECT PROFESSIONAL EXPERIENCE

Research

Independent Consultant, Present. Senior researcher and advisor on mainstreaming gender, and race and ethnicity; specialties in issues of livelihood development, displacement, disasters, poverty, and policy

Study Director, Institute for Women's Policy Research, 2008-2013. Supervised and conducted research and analysis independently and in group projects on gender, development, disparity, and policy; authored and co-authored reports and publications including policy recommendations; prepared grants, legislative, media and other communication; served on review committees and worked with outside researchers, policymakers, academics, and advocates; specialization in qualitative and mixed methods; responsibilities included:

- Conducted qualitative field research and co-authored published report for a mixed methods study about NGOs and faith-based organizations working to assist Latin American immigrant women in three U.S. urban areas; funded by the Ford Foundation; conducted interviews in English and in Spanish
- Supervised and conducted desk-based research, and authored and co-authored published reports and materials for immigration and labor policy advocates, regarding career development and visa issues among immigrant women in-

home care workers in the United States; funded by Ms. Foundation, Open Society Foundations, and the Annie E. Casey Foundation

- Supervised and conducted multi-year field research with African American women tenants of New Orleans public housing and Hurricane Katrina; co-authored fact sheets, a book chapter; authored funder's report; analyzed data within context of U.S. disaster, urban planning, and social safety net policies and authored report for publication currently under review; funded by the Bill & Melinda Gates Foundation as a Social Science Research Council (SSRC) Katrina Task Force project
- Directed team that coded all focus group data across 19 nations for the World Bank's "*World Development Report 2012: Gender Equality and Development*;" subcontracted by World Bank
- Directed IWPR team in partnership with International Foundation for Electoral Systems (IFES) team in original field survey design and analysis, report publication, and in-country presentations on the status of women in the Middle East and North Africa; co-authored capacity-building toolkit for NGOs to improve policy using status of women research; funded by Canadian International Development Agency
- Conducted expert interviews for analysis of and recommendations concerning best practices in postsecondary education programs helping low-income student parents in United States; funded by Bill & Melinda Gates Foundation
- Managed portion of focus group study examining barriers to women running for high-level elected offices; funded by Hunt Alternatives Fund

Principal Investigator, George Washington University Grants, Global Gender Program, Elliott School of International Affairs and International Institute of Tourism Studies, June 2013. Conducted open-ended interviews with government and NGO representatives, and with low-income women across multiple communities, on post-disaster development following the 2007 earthquake along Peru's southern coast as part of a proposed larger study

Principal Investigator, Faculty Research Grants, Office of Vice-Provost for Extended Programs, University of Memphis, 2006–2007. Evaluated nonprofit job training and housing programs to assist low-income African American and immigrant Latina women; conducted preliminary study of communities to be impacted by NAFTA highway expansion in Tennessee; conducted interviews in English and in Spanish

Visiting Fulbright Scholar, J. William Fulbright Foreign Scholarship Board Award, 2006. Interviewed Peruvian NGOs assisting women through development tourism and handicraft export, investigated potential effects of Peru-US Trade Agreement on small-scale producers; conducted interviews in Spanish

Research Scientist, Pennsylvania State University, John D. and Catherine T. MacArthur Foundation, University of Texas at Austin Center for Social Work Research, Robert Wood Johnson Foundation sub-contracts, 2002 and 2003.

Analyzed longitudinal qualitative material and published with analyses of multi-wave quantitative data, from Boston, Chicago, and San Antonio for "Welfare, Children, & Families: A Three-City Study," on conditions related to changes in U.S. social safety net policies affecting low-income women and their households; supervised San Antonio follow-up interviews and qualitative data management

Research Scientist and Postdoctoral Research Fellow, "Welfare, Children, and Families: A Three-City Study," University of Texas at Austin Population Research Center, Center for Social Work Research, 1998–2001. Managed San Antonio site for interdisciplinary and longitudinal research project; conducted qualitative ethnographic research with low-income women, less than half of whom were receiving TANF (cash welfare) and the other portion were income-eligible although not enrolled, and with local private nonprofit organizations and government agencies; trained and supervised teams of graduate and undergraduate students in interview methods, ethnographic theory, and QSR NVivo coding and analysis; following fellowship (1998-2000), hired as research scientist (2000-2001); conducted interviews in English and in Spanish

Contract Field Researcher, University of Texas at Austin Center for the Study of Human Resources and Lyndon B. Johnson School of Public Affairs, 1996–1997. Interviewed low-income adults on Food Stamp use for published report; conducted interviews in English and in Spanish

Contract Ethnographer, "Minority Math and Science Education Cooperative," Texas Higher Education Authority, 1991–1992. As part of a statewide study, residing for three-month periods within homes in two working-class neighborhoods in a U.S.-Mexico border city; conducted ethnographic project inside classrooms and homes interviewing citizen and non-citizen elementary school students, their parents, and their teachers; conducted interviews in English and in Spanish

Consulting

Technical Consultant, Solimar International advisor, June 2014. Advised on social justice/gender mainstreaming project innovation and design within sustainable business development in the nation of Jordan

Technical Consultant, Health Policy Project (Futures Group)/U.S. Agency for International Development and the President's Emergency Plan for AIDS Relief, May 2014. Advised on gender-responsive health governance, policy, and implementation

Technical and Research Consultant, American Planning Association/Centers for Disease Control and Prevention, 2012-2013. Advised on gender and other aspects of inclusion and diversity within city planning, and on study design and qualitative research methods; served as reviewer on report, *Integrating Health Into the Comprehensive Planning Process: An analysis of seven case studies and recommendations for change*, by Anna Ricklin and Nick Kushner

Training

Lawry Research Associates International, 2013. Conducted training workshop on qualitative data coding and analysis

Mathematica Policy Research, Inc., 2000. Prepared quantitatively trained professional researchers in ethnographic research methods

Teaching and Advising

Professorial Lecturer, George Washington University Elliott School of International Affairs and Global Gender Graduate Program, 2012–present

Graduate Committee Faculty, University of California-Los Angeles Department of Political Science, 2011-2014

Lecturer and Graduate Committee Faculty, George Mason University Department of Anthropology, 2008

Assistant Professor, University of Memphis Department of Anthropology and Honors Program, 2001–2008

Visiting Fulbright Scholar, Catholic University of Peru Department of Anthropology and Graduate Program in Gender Studies, 2006

SELECT PUBLICATIONS

Peer-reviewed Books

2006 Editor, *Doing Without: Women and Work after Welfare Reform*, Tucson: University of Arizona

2006 (with Ronald Angel and Laura Lein) *Poor Families in America's Health Care Crisis: How the Other Half Pays*, New York: Cambridge University; *Choice* 2007 Outstanding Academic Title

Peer-reviewed Book Chapters and Articles

2014 Disasters, Gender, and Policy, in *International Encyclopedia of the Social and Behavioral Sciences*, 2nd edition, edited by James Wright, Elsevier, submitted and under review

2014 Seeking Equilibrium: Gender, Ethnicity, and Race within Alternative Trade and Tourism Development, in *Towards a Publicly Relevant Anthropology*, edited by Elisabeth Tauber and Dorothy Zinn, Bozen Bolzano University, under revision and forthcoming

2012 (with Allison Suppan Helmuth and Angela Carlberg) Doubly Displaced: Women, Public Housing, and Spatial Analysis after Katrina, in *The Women of Katrina: How Gender, Race, and Class Matter in an American Disaster*, edited by Emmanuel David and Elaine Enarson, Vanderbilt University, pp. 142-154

2010 Free Trade, Alternative Trade, and Women in Peru: A First Look. In *Gender and Globalization: Patterns of Women's Resistance*, edited by Erica G. Polakoff and Ligaya Lindio-McGovern, Whitby, Ontario: de Sitter Publications; reprint of 2007 Free Trade, Alternative Trade, and Women in Peru: A First Look, *Journal of Developing Societies*; 23: 145–157

2010 Naming Rights: Ethnographies of Fair Trade, In *Fair Trade and Social Justice: Global Ethnographies*, edited by Sarah Lyon and Mark Moberg. New York: New York University, pp. 283-298

2007 Género, Turismo y Exportación: ¿Llamando a la plata en el Perú? *Antropológica*. XXV (25): 83-101

2007 (with Laura Lein and Ronald Angel) Women and Children and the Health Care Gap, In *Child Poverty in America Today, Vol. 4: Children and the State*, edited by Barbara A. Arrighi and David J. Maume, Westport, CT: Praeger, pp. 56–70

2006 Agents of Change: Nonprofit Organization Workers following Welfare Reform, In *Doing Without: Women and Work after Welfare Reform*, Tucson: University of Arizona, pp. 172–189

2006 (with E. Carol Miller) Work First, Then What? Families and Job Training after Welfare Reform, In *Doing Without: Women and Work after Welfare Reform*, Tucson: University of Arizona, pp. 64–80

2006 (with Laura Lein and Ronald Angel) Women after Welfare Reform. In *Doing Without: Women and Work after Welfare Reform*, Tucson: University of Arizona, pp. 1–19

Policy Briefs, Fact Sheets, and Reports

2013 “Improving Career Opportunities for Immigrant Women In-Home Care Workers,” IWPR #I925

2013 (with Cynthia Hess) “Increasing Pathways to Legal Status for Immigrant In-Home Care Workers,” IWPR #I924

2012 “Community College Partnerships for Student and Career Success: Program Profile of *Carreras en Salud*,” IWPR #C397

2012 (with Jennifer Herard, Kevin Miller, and Barbara Gault) “Low Literacy Means Lower Earnings, Especially for Women,” IWPR #C392

2010-2011 (with multiple authors) Topic briefs on the Status of Women in the Middle East and North Africa on Morocco, Yemen, and Lebanon, IWPR and International Foundation for Electoral Processes

2011 (with Cynthia Hess and Claudia Williams) "Organizations Working with Latina Immigrants: Resources and Strategies for Change," IWPR, #1922

2010 (with Allison S. Helmuth, Frances Zlotnick, and Jeff Hayes) "Women in Poverty During the Great Recession: Public Benefits Do Not Always Respond to Rising Need, Variation Across States is Substantial," IWPR, #D493

2010 (with Allison S. Helmuth) "Women in New Orleans: Race, Poverty, and Hurricane Katrina," IWPR, #D490

2010 (with Allison S. Helmuth and Rhea Fernandes) "Mounting Losses: Women and Public Housing after Hurricane Katrina," IWPR, #D491

2010 (with Allison S. Helmuth and Jackie Braun) "Women, Disasters, and Hurricane Katrina," IWPR, #D492

2001 (with Ronald Angel, Laura Lein, and Emily Leventhal) Health Insurance Coverage for Children and Their Caregivers in Low-income Urban Neighborhoods, for Welfare, Children and Families: A Three-City Study Policy Brief 01-2, Johns Hopkins University

2001 (with Andrew Cherlin, Linda Burton, Judith Francis, Laura Lein, James Quane, and Karen Bogen) Sanctions and Case Closings for Noncompliance: Who Is Affected and Why, for Welfare, Children and Families: A Three-City Study Policy Brief 01-1, Johns Hopkins University

2001 (with Andrew Cherlin, Paula Fomby, Ronald Angel) Public Assistance Receipt among Native-Born Children of Immigrants, for Welfare, Children and Families: A Three-City Study Policy Brief 01-3, Johns Hopkins University

Book Reviews

2014 (with Allison Suppan Helmuth) *Driven from New Orleans: How Nonprofits Betray Public Housing and Promote Privatization*, by John Arena, University of Minnesota Press, 2012. *Sociological Inquiry*, in press

2012 *Unveiling Secrets of War in the Peruvian Andes*. Olga M. González. Chicago: University of Chicago Press, 2011. *Visual Anthropology Review*, 28(1): 78-79

2011 *Capitalizing on Catastrophe: Neoliberal Strategies in Disaster Reconstruction*, edited by Nandini Gunewardena and Mark Schuller, *American Ethnologist* 38(4): 848-849

2000 *Cultural Tourism: A Strategic Focus*, by Alf H. Walle, *Practicing Anthropology*, 22(3): 4

Toolkit

2012 (with Denise Baer, Layla Moughari, and Barbara Gault) *Using Research on the Status of Women to Improve Public Policies in the Middle East and North Africa: A Capacity-Building Toolkit for Nongovernmental Organizations*. Washington, DC: IFES and IWPR

Other

2010 A Gendered Response to Disaster: In the Aftermath of Haiti's Earthquake. *Anthropology News* 51(7): 5

2006 (with Polly Spiegel). The Non-Public Process of a US Interstate Highway Corridor, Society for the Anthropology of North America column, *Anthropology News*, March

2004 Training them to Take It: Research on Job Training for Low-Income Women in the US, *Standpoint*, Center for Research on Women, University of Memphis, March

2002 US Women and Poverty, *Voices –Association for Feminist Anthropology Special Issue*, edited by Sandra Morgen, pp. 27–31

SELECT HONORS AND AWARDS

2011	Listed as Woodrow Wilson International Center for Scholars Expert, Gender
2007	<i>Poor Families in America's Health Care Crisis</i> named one of the <i>Choice</i> Outstanding Academic Titles for 2007
2007	Honorable Mention, 2006 Susan Koppelman Best Anthology, Multi-Authored or Edited Book in Feminist Studies in Popular/American Culture, Popular/American Culture Association, for <i>Doing Without: Women and Work after Welfare Reform</i>
2006	Visiting Scholar Award, J. William Fulbright Foreign Scholarship Board, for project "Gender and Free Trade: Peruvian Alternative Trading Projects and Free Trade Agreements," Peru
2005–2006	Distinguished Faculty Teaching Award Finalist, University of Memphis
2006–	Phi Beta Delta Honor Society for International Scholars
2003–2009	Research Affiliate Status, Center for Research on Women, University of Memphis
1989–	Phi Kappa Phi Academic Honor Society (Life Membership)

SELECT GRANTS AND CONTRACTS

Institutional External Funding

2010–2013	Project Director, proposal co-author, multiple grants and contracts to IWPR
2006–2007	Co-Principal Investigator, written into Community Foundation of Greater Memphis Community Grant, to Memphis Area Women's Council Workforce Action Collaborative

- 2005 Faculty Exchange Award, Regional Educational Network Between the European Union and the United States (RENEUUS), for "Gender, Tourism and Free Trade"
- 2005 Faculty Exchange Award, University Center for International Studies, Center for the Study of the American South, and The Rockefeller Foundation, "Navigating the Globalization of the American South" Conference, University of North Carolina-Chapel Hill
- 2003 Research Scientist, "Welfare, Children and Families: A Three-City Study," sub-contracted with the University of Texas Center for Social Work Research under grant from The Robert Wood Johnson Foundation
- 2002 Research Scientist, "Welfare, Children and Families: A Three-City Study," sub-contracted with Pennsylvania State University under grant from The John D. and Catherine T. MacArthur Foundation
- 2000-2001 Research Scientist, "Welfare, Children and Families: A Three-City Study," sub-contracted with the University of Texas Center for Social Work Research under grant from The Robert Wood Johnson Foundation
- 1998-2000 Postdoctoral Research Fellowship, Hogg Foundation Award, The University of Texas at Austin Population Research Center/Center for Social Work Research

Institutional Internal Funding

- 2013 Principal Investigator, "Gender, Race, and Tourism Development in Disaster Recovery," Research Grants from Global Gender Program, Elliott School of International Affairs, and International Institute of Tourism Studies, School of Business, of The George Washington University
- 2006 Principal Investigator, Faculty Research Grant, The Office of Vice-Provost for Extended Programs, University of Memphis, for "Women and Memphis Workforce Development"
- 2005-2006 Principal Investigator, Benjamin L. Hooks Institute for Social Change Working Group Grant, with Steve Scanlan, for "North American Research and Action Network: 2005 Web Focus," public access and education
- 2005 Faculty Exchange Award, Center for Research on Women, University of Memphis, "Imagining Public Policy to Meet Women's Economic Security Needs" Conference, CCPA/Simon Fraser University, Vancouver, British Columbia, Canada
- 2005 Faculty Exchange Award, Center for Research on Women, University of Memphis, "Women and Globalization" Conference, San Miguel de Allende, Mexico

SELECT CONFERENCE AND SYMPOSIA PRESENTATIONS

"Gender and Migration in U.S. Planning: Recognizing Problems and Improving Responses," on Hosted Organized Session "Overcoming Gender Bias in Immigrant

Communities,” American Planning Association 2014 National Planning Conference, Atlanta, 27 April 2014

“Gender and Race Post-Disaster in Peru: Resilience, Recovery, and Research,” Institute for Global and International Studies Sandwich Symposium, Elliott School of International Affairs, George Washington University, 24 October 2013

“Post-Disaster Organizing to Help Women Across the Americas: Resilience, Recovery and Research,” 63rd Society for the Study of Social Problems Annual Meeting, New York, 11 August 2013

“Research on Women in the Middle East and North Africa & The Arab Spring: Findings from Gender Surveys in Lebanon, Morocco, and Yemen and Electoral Surveys in Egypt and Tunisia,” with Rola Abdul-Latif, Middle East Dialogue, International Policy Studies Organization, Washington, DC, 24 February 2012

“Gender and Disaster across the Americas,” 4th Annual Lozano Long Conference, “From Natural Events to Social Disasters in the Circum-Caribbean,” Lozano Long Institute for Latin American Studies, University of Texas at Austin, Austin, 25 February 2011

“Intersectional Policy: Gender, Race and Ethnicity Meet Immigrant Status,” on Organized Session “The Racialization of Latinos: Everyday Lived Experiences Of Discrimination,” Patricia Foxen, Organizer, 110th Annual meeting of American Anthropological Association, Montreal, 16-20 November 2011

“After the Flooding of New Orleans: Women, Public Housing, Transportation, and Disasters,” on Invited Organized Session, American Educational Research Association Annual Meeting, New Orleans, 8-12 April 2011

“Organizations Working with Latina Immigrants: Resources and Strategies for Change,” report release co-speaker, Institute for Women’s Policy Research-National Council of La Raza-Wilson Center Joint Symposium, at Woodrow Wilson International Center for Scholars, Washington, DC, 25 March 2011

“‘You’ve Got to Tell Them’: Research with Women Displaced from New Orleans Public Housing,” on Organized Session with Executive, Engaging Anthropology, and Association for Feminist Anthropology Invited Status, “Doubly Displaced: Women and Public Housing after the New Orleans Post-Katrina Flood,” 109th Annual Meeting of the American Anthropological Association, New Orleans, 17-21 November 2010

“Gender and Disaster in the Americas,” on Organized Session Invited by Society for Latin American and Caribbean Anthropology, “Conversations across the Americas,” Ramona Perez, Organizer/Chair, 109th Annual Meeting of American Anthropological Association, New Orleans, 17-21 November 2010

"New Families, New Friends: Gaps in Support Services for Latina Immigrants," Latin American Studies Association International Congress, Toronto, 6-9 October 2010

"Space in the City: Women, Public Housing, and Urban Planning after Katrina," at symposium "Hurricane Katrina: Bringing Hurricane Katrina Research Back to the Community," Center for Policy and Resilience Conference, University of Southern Mississippi Gulf Coast, Long Beach, 4-5 June 2010

"Revolving Funds: Peruvian Women Migrants as Workers, Entrepreneurs, and Tourists," on Organized Session, "From Remitting Migrants to Market-Savvy Entrepreneurs: Reconceptualizing Diaspora and Development," Caroline Melly and Monica DeHart, Co-Organizers/Chairs, 107th Annual Meeting of American Anthropological Association, San Francisco, 19-23 November 2008

"Peruvian Women, Free Trade Agreements, and Alternative Trade: A New Look" with Organized Session Co-Invited by Society for Urban, National and Transnational/Global Anthropology and Association for Political and Legal Anthropology, "NGOs as Agents of Globalization," Mark A. Schuller, Organizer/Chair, 105th Annual Meeting of American Anthropological Association, San Jose, California, 15-19 November 2006

"El Género, la Exportación, y el Turismo: Nuevos Cambios" Fulbright Commission and Catholic University of Peru Department of Social Sciences, Lima, Peru, 6 July 2006

"Gender and Free Trade: Alternative Trade Organizations and Women in Peru" on Organized Session, "Fair Trade/Free Trade: Alternatives and Realities in Cross-Cultural Perspective," Sarah M. Lyon, Organizer/Chair, 104th Annual Meeting of American Anthropological Association, Washington, DC, 30 November-4 December 2005

"Learning to be Poor: Job Training and Women in the US," "Imagining Public Policy to Meet Women's Economic Security Needs" Conference, CCPA/Simon Fraser University, Vancouver, 14-15 October 2005

"Exchanges South and North: Collaboration and Communication and the NGO/Nonprofit Sector," on Organized Session "NGO Research: Methodological and Ethical Challenges," Nathalie Lebon, LeeRay Costa, and Donna Murdock, Co-Organizers/Chairs, 101st Annual Meeting of the American Anthropological Association, New Orleans, 20-24 November 2002

"Neighborhood Organizations and the People Who Use Them: A Spatial Consideration of Welfare Reform," with James Quane, Pamela Joshi, and Gwendolyn Dordick, on Invited Session, "Not by Jobs Alone: Families, Neighborhoods, and Welfare Reform," Linda M. Burton and William Julius Wilson, Co-Organizers, Annual

Meeting of American Sociological Association, Chicago, 16-19 August 2002

"Health Insurance Coverage for Vulnerable Children in the Context of Welfare Reform," co-presenter with Ronald Angel and Laura Lein, with organized poster symposium, "The Three-City Study of Welfare, Children, and Families: A Multidisciplinary Approach for Science to Influence Policy," Lindsay Chase-Landsdale, Organizer, Biennial Meeting of Society for Research in Child Development, Minneapolis, 19-22 April 2001

"Women, Wages, and Motherhood within Welfare Reform," co-author Laura Lein, with Organized Session, American Anthropological Association 100th Annual Meeting, Washington, DC, 28 November–2 December 2001

"Women's Studies and Research on Poverty," Women's Studies Symposium, "Women's Studies Scholarship at the University of Memphis," University of Memphis, 5 October 2001

"Health Insurance Coverage for Vulnerable Children in the Context of Welfare Reform," co-presenter with Ronald Angel and Laura Lein, with organized poster symposium, "The Three-City Study of Welfare, Children, and Families: A Multidisciplinary Approach for Science to Influence Policy," Lindsay Chase-Landsdale, Organizer, Biennial Meeting of Society for Research in Child Development, Minneapolis, 19–22 April 2001

"Being Blamed: Women and Local Responses to Welfare-To-Work," with Organized Session, "Engendered Economies: Women and Alternative Organizations in the Americas," Society for Latin American Anthropology Annual Meeting/Latin American Studies Association Semi-Annual Meeting, Miami, 16–18 March 2000, with Organized Session, "Engendered Economies: Women and Alternative Organizations in the Americas" Invited by Association for Feminist Anthropology, American Anthropological Association 98th Annual Meeting, Chicago, 17–21 November 1999

"A Three-City Ethnography," with Organized Session, "Combining Qualitative and Quantitative Data in Impact Evaluations of Welfare Reform," Twenty-first Annual Association for Public Policy Analysis and Management Research Conference, Washington, DC, 4–6 November 1999

INVITED LECTURES

"Caring for Workers and Workers Who Care: Gender and Migration Issues in U.S. Policy and Planning," Institute for Immigration Research Colloquium presentation and webcast, George Mason University, 29 January 2014

"Working Together: Low-Income Latina Immigrants, Service Organizations, and Northern Virginia," Smithsonian Cultural Center presentation and webcast, Washington, DC, 5 December 2012

“Research and Resilience,” George Washington University’s Global Gender Program and World Bank’s Global Facility for Disaster Reduction and Recovery (GRDRR) event, “Women and Girls: Forces for Creating Disaster-Resilient Societies,” Washington, DC, 11 October 2012

“Anthropology and Policy: Poverty and Reform in the United States,” and “Rethinking Fair Trade: Gender and Ethnicity within Transnational Handicraft Exchanges,” at the Free University of Bozen-Bolzano, Italy, 8 and 9 October 2012

“Dangerous Intersections: Issues of Identity and Disaster Policy,” Department of Women’s Studies, San Diego State University, CA, 19 October 2011

“Disasters and the Intersections of Race, Gender, and Class Across the Americas,” Trevor W. Purcell Lecture, Department of Anthropology, University of South Florida, FL, 13 April 2011

“Ethnicity, Gender, Trade, and Tourism: Shifting Identities and Peru,” Critical Race Studies, Benjamin L. Hooks Institute Working Group, University of Memphis, 30 October 2006

“Gendered Transnational Processes,” Symposium on “National and International Migration: Implications for the Sending and Receiving Zones,” Catholic University of Peru Graduate School of Social Sciences, Lima, Peru, 30–31 March 2006

“El Género y la globalización,” International Economics, College of Communication Faculty of Universidad Pontificia de Salamanca, Spain, 10 May 2005

Keynote Speaker, Executive Directors’ Roundtable, “Women after Welfare Reform,” United Neighborhood Centers of America, Inc., San Antonio, TX, 11 February 2000

SELECTED SERVICE

Listed Expert, Woodrow Wilson International Center for Scholars, 2011-present

President, 2011-2013; *President-Elect*, Association for Feminist Anthropology, 2009–2011; *Executive Board Member*, Association for Feminist Anthropology, 2006–2008

Council Member, Society for Latin American and Caribbean Anthropology, 2009–2012

Proposal Reviewer, Rockefeller Foundation Bellagio Scholarly Residency Competition, 2008

Advisory Committee Member and Program Evaluator, *Mi Techo* non-profit organization assisting low-income Latin American immigrants with housing issues, 2005–2007

Advisory Committee Member and Program Evaluator, La Maestra, non-profit organization providing English-as-a-Second-Language classes to low-income recent Latin American immigrants, 2003–2007

Grant Proposal Reviewer, Social Science and Humanities Research Council of Canada, Special (three-year) Research Opportunity Program for Professors, 2006

Grant Proposal Reviewer, United States Social Science Research Council and American Council of Learned Societies International Dissertation Field Research Fellowship Program 2003, 2004, 2005

PROFESSIONAL MEMBERSHIPS

American Anthropological Association
and sections:

Association for Feminist
Anthropology; Society for the
Anthropology of North America;
Society for the Anthropology of
Work; Society for Economic
Anthropology; Society for Latin
American and Caribbean
Anthropology; Society for Urban,
National, and
Transnational/Global
Anthropology; Society for Visual
Anthropology

Gender and Disaster Network
Latin American Studies Association
and sections:
Ethnicity, Race, Indigenous Peoples;
Gender and Feminist Studies
Section
Latino Studies; Peru
NGOs and Anthropology Group
Society for Applied Anthropology
Society for International
Development, Washington, DC
Washington Association of
Professional Anthropologists

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs

v.

RICK PERRY, *et al.*,


Plaintiffs

Civil Action No. 2:13-cv-193 (lead)
(consolidated w/ 2:13-cv-263)

Declaration of Michael C. Herron

Attached is my expert report in this litigation. I declare under penalty of perjury under the laws of the United States that the report is true and correct to the best of my knowledge.

Signature and Date

 6/27/2014

Rates of Valid Voter Identification Possession among Registered Voters in Texas

1 Introduction

2 In the matter of *Marc Veasey, et al., v. Rick Perry, et al.*, I was asked by
 3 plaintiffs' counsel Chad Dunn of *Brazil & Dunn* to analyze a dataset which
 4 contains information on the rates at which registered voters in the state of
 5 Texas have valid forms of voter identification per requirements set forth in
 6 Texas Senate Bill 14 (SB 14), a piece of legislation signed into law in Texas
 7 on May 27, 2011.¹ The dataset I was asked to analyze contains the results of
 8 applying two distinct matching algorithms—specifically, a plaintiff algorithm
 9 and a defendant algorithm—to a variety of lists of individuals. The existence
 10 of two matching algorithms, both of which compare lists of registered voters
 11 in Texas to lists of individuals who have been issued forms of identification
 12 permitted by the aforementioned SB 14, reflects the outcome of a negotiated
 13 process between plaintiffs and defendants in the contest noted above. I did
 14 not execute either of the two algorithms. Rather, Mr. Dunn requested that I
 15 analyze the output of them, and this report describes my analysis in response
 16 to Mr. Dunn's request.

17 ¹The legislative history of Senate Bill 14 is described in [http://www.capitol.](http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14)
 18 [state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14](http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14) (last accessed June
 19 19, 2014).

1 I am William Clinton Story Remsen 1943 Professor of Government at
2 Dartmouth College and have taught in the Department of Government at
3 Dartmouth since 2003. I previously was on the faculty of Northwestern Uni-
4 versity, and I have visited at Harvard University, the University of Rochester,
5 and the Hertie School of Governance in Berlin. In January, 1998, I received a
6 doctorate in the field of Political Economy from the Graduate School of Busi-
7 ness at Stanford University. I also have a master's degree in statistics from
8 Stanford University (June, 1995), a master's degree in political science from
9 the University of Dayton (August, 1992), a bachelor's degree in mathematics
10 and economics from Carnegie-Mellon University (May, 1989).

11 I have published in many political science journals including the field's
12 top general journals: *American Political Science Review*, *American Journal*
13 *of Political Science*, and *Journal of Politics*. I have published as well in
14 speciality journals like *Election Law Journal*, *American Politics Research*,
15 and *Legislative Studies Quarterly* and have consulted in a variety of legal
16 cases. My curriculum vitae, which lists all of my published papers, is attached
17 to this report as Appendix D. I have not been offered as a testifying expert
18 in the past four years.

19 The techniques used in this report are typical of, and in some cases iden-
20 tical to, techniques that I have used in the past and continue to use regularly
21 as part of my academic research agenda. In addition, the software and hard-
22 ware that I used in the course of preparing this report are standard, and
23 to the best of my knowledge other scholars who work on the types of data

1 described here regularly rely on software and hardware similar or identical to
2 the software and hardware, respectively, used in the work described in this
3 report.

4 I am being paid a flat fee of \$15,000 for the work described in this report.
5 I will be compensated at a rate of \$250/hour, plus expenses, for deposition
6 and trial time.

7 This report relies on the following source material:

- 8 1. Nine documents sent to me by plaintiffs' counsel on May 30, 2014, plus
9 a corrected document sent to me by plaintiffs' counsel on June 25, 2014.

10 The ten documents are as follows:

- 11 (a) Letter to plaintiffs, dated May 30, 2014, signed by Anna M. Bald-
12 win of the United States Department of Justice.
- 13 (b) Exhibit A, Final Plaintiffs' Algorithm. Title: "United States'
14 Database Matching Protocol"
- 15 (c) Exhibit B, Database Matching Criteria v2 (Final Defendants' Al-
16 gorithm). Title: "Criteria for Matching Records in the TEAM
17 Database"
- 18 (d) Exhibit C, State Department. Title: "Declaration of Lee Charles
19 Baydush"
- 20 (e) Exhibit D, Defense. Title: "DECLARATION OF Michelle Saun-
21 ders Rudolph"
- 22 (f) Exhibit E, VHA. Title: "DECLARATION OF MICHAEL MIMS"

1 (g) Exhibit F, VBA. Title: "DECLARATION OF KENNETH
2 SMITH"

3 (h) Exhibit G, SSA. Title: "DECLARATION OF STEVE
4 STRAUSLER"

5 (i) Exhibit H, USCIS. Title: "DECLARATION OF YEMI B. OS-
6 HINNAIYE"

7 (j) Corrected Exhibit C, "CORRECTED DECLARATION OF LEE
8 CHARLES BAYDUSH"

9 2. Data reporting plaintiff and defendant matching algorithm results, sup-
10 plied to my by the United States Department of Justice on an encrypted
11 storage device.

12 3. Publicly-available census data on the definition of blocks and block
13 groups, downloaded from the website of the United States Census Bu-
14 reau.

15 4. Publicly-available census data from the American Community Survey
16 2008-2012, downloaded from the website of the United States Census
17 Bureau.

18 5. Geocoded addresses, supplied to me by an independent contractor as
19 discussed in the body of this report.

20 At the request of plaintiffs' counsel I am supplying four USB key drives
21 that contain in an encrypted form copies of the above files and documents

1 plus other code that I wrote in support of this report.

2 After a summary of main findings, in the next section of this report I
3 describe the data on which the report is based and the key data management
4 steps that I took upon receiving the data. Following the data section I
5 describe my analysis of the plaintiff matching algorithm as applied to lists
6 of registered Texas voters and to lists of individuals who have valid forms of
7 identification per SB 14. The last section of the report describes my analysis
8 of the defendant matching algorithm as applied to these lists.

9 **Summary of main findings**

10 The key findings in this report are as follows.

11 1. Of 13,564,410 registered voters in Texas, conservatively speaking
12 1,232,240 (or approximately 9.08%) appear to lack access to valid forms
13 of voter identification per current Texas state law. If for the purposes
14 of calculating the fraction of registered Texans who lack voter identi-
15 fication the 45,514 registrants who appear to be deceased are ignored,
16 then approximately 9.11% of the registrant pool in Texas lacks voter
17 identification. These results are based on the output of a plaintiff algo-
18 rithm that assesses rates of valid voter identification possession among
19 Texas registered voters.

20 2. Restricting attention to 2,143 census block groups in Texas that are at
21 least 90% Hispanic, 90% white, or 90% black based on citizen voting

1 age population, white registered Texans possess valid forms of voter
2 identification at a rate greater than registered Hispanics and registered
3 blacks.

4 3. An ecological regression analysis of 11,947 census block groups in Texas
5 also shows that white registered Texans possess valid forms of identifi-
6 cation at a rate greater than registered Hispanics and registered blacks.

7 4. A defendant algorithm for assessing rates of valid voter identification
8 possession among Texas registered voters generates conclusions that
9 are qualitatively identical to those based on the plaintiff algorithm that
10 produced the conclusions listed above.

11 **Data and data management**

12 On Saturday, May 31, I received an encrypted storage device sent to me
13 by officials in the United States Department of Justice in Washington, D.C.
14 Hereinafter I refer to this encrypted device simply as the device. I was
15 provided a password to the device by plaintiffs' counsel, and I used this
16 password to mount the device on a computer that I regularly use for data
17 analysis. I copied without complications the contents of the device to this
18 computer. To the best of my knowledge, the defendants in the contests noted
19 at top of this report received the same data files that I did although without
20 redactions; I note that the files I received were redacted in the sense of not

1 containing full social security numbers.

2 The device contains a folder titled "forPlaintiffs," and this folder con-
3 tains eight additional folders. Each such folder in "forPlaintiffs" is titled
4 "Source_Agency" where "Agency" is either an unit of the federal government
5 or is the state of Texas. For example, one such folder is titled "Source_DOJ"
6 and another folder, "Source_Texas." Hereinafter I refer to these folders as
7 source folders. From plaintiffs' counsel I received via email nine documents
8 (and later a corrected document) which among other things describe the con-
9 tents of the eight source folders on the device and the file naming conventions
10 used in these folders. I have relied on these documents to understand the
11 contents of the source folders.

12 Along with other files, the source folders on the device include ascii data
13 files which contain data on registered voters in Texas. In particular, the ascii
14 data files are composed of rows that correspond to Texas registered voters
15 as of January 15, 2014. This date is specified in a May 30, 2014, letter to
16 all parties signed by Anna M. Baldwin of the United States Department of
17 Justice. Henceforth when I refer to registered voters in Texas, or lists thereof,
18 I am referring to registered voters in this state as of January 15, 2014.

19 The ascii data files in the eight source folders on the device describe the
20 results of two matching algorithms applied to various lists of individuals.
21 Henceforth I call the algorithms the plaintiff algorithm and the defendant
22 algorithm. Each of these algorithms compares a list of registered voters
23 in Texas with lists of individuals who have forms of identification that are

1 specified in SB 14. The list of registered voter in Texas is drawn from what
 2 is called the Texas Election Administration Management (TEAM) database,
 3 and the lists of individuals who have forms of identification are drawn from
 4 what are called target databases. The various target databases that the
 5 plaintiff and defendant algorithms utilize are listed in Table 1. This table
 6 also notes the forms of identification associated with each target database.

Table 1: Target Databases

Database	Form of identification
Texas Department of Public Safety	Drivers's license, Personal identification card Concealed handgun license Election identification certificate
Department of Defense	Military common access card Uniformed services identification card Civilian retiree card
Department of Veterans Affairs	Veterans affairs card
Department of Homeland Security	Certificate of citizenship Certificate of naturalization
Department of State	United States passport United States passport card

Note: above the dashed line are Texas state databases and forms of Texas identification. Below the line are federal databases and forms of federal identification.

7 As made clear in Table 1 , there are two types of target databases: Texas
 8 target databases, which contain lists of individual who have Texas-issued
 9 forms of identification, and federal target databases, which contain lists of
 10 individuals who have federal forms of identification. Hereinafter I refer to the

1 Texas Department of Public Safety as the DPS. The Texas DPS database
2 consists of four elements, one corresponding to each of the types of iden-
3 tification noted in Table 1. In this report I sometimes refer to the DPS
4 driver's license database; this database is a list of all individuals who as of
5 a given date have valid Texas driver's licenses. When I refer to, say, the
6 Texas driver's license database, this should be understood as referring to the
7 driver's license portion of the overall DPS database.

8 The goal of the plaintiff and defendant matching algorithms is to assess
9 whether registered voters in Texas (those whose names appear in the TEAM
10 database) also are listed in Table 1's target databases. The idea here is as
11 follows: if a hypothetical registered Texas voter in the TEAM database can
12 be associated with a record in, say, the Texas driver's license database, then,
13 assuming that this association is valid, it can be said that the registered voter
14 was issued a valid Texas driver's license that, as of a given date, was still
15 valid.

16 Determining if Texas registered voters listed in the TEAM database also
17 appear in the target databases of Table 1 requires comparing a list of Texas
18 registered voters with lists of individuals who possess SB 14-approved forms
19 of voter identification. It should be noted that the TEAM database and the
20 databases listed in Table 1 are maintained by agencies at different levels of
21 government, that these databases do not always contain identical fields, that
22 the individuals in the TEAM database do not always have unique names and
23 other personal characteristics, and that individuals in the target databases

1 also do not always have unique names and personal characteristics.

2 When in this report I refer to an individual having or possessing a given
3 form of identification that is suitable for voter identification per SB 14, this
4 refers solely to the fact that said individual was found by a matching algo-
5 rithm on a list of individuals who were issued the form of identification in
6 question. With the data I have been provided, I cannot ascertain if a person
7 who was issued a form of identification has this form in his or her possession
8 and/or has ready access to it.

9 The United States Department of Justice (hereinafter, DOJ) and various
10 federal agencies were responsible for executing both the plaintiff and the
11 defendant algorithms. For details on the algorithms' steps, see Appendix A.
12 The output of these algorithms was a set of files that appear in the source
13 folders on the device. These files contain fields which indicate whether a given
14 Texas registered voter was determined, based on a set of specified criteria, to
15 have a particular form of identification. I discuss these criteria later, and for
16 the moment it suffices to note that the two algorithms differ in the criteria
17 they use to ascertain whether registered voters in Texas have particular forms
18 of identification, i.e., whether registered voter records in the TEAM can be
19 associated with records in the target databases.

20 Table 2 lists the source files on the device that contain results, among
21 other things, of applying the plaintiff and defendant algorithms to the target
22 databases listed in Table 1. The table lists the number of lines in each source
23 file as well as the number of Texas registered voters in each file. In most

Table 2: Data files containing results of plaintiff and defendant matching algorithms

Filename	Source	Lines	Registered voters
DOD_results_redacted	DOD	13,564,421	13,564,420
TEAM_Update_20140526.txt	DOD	13,564,420	13,564,420
DOJ_results_redacted	DOJ	13,564,411	13,564,410
Texas_results_redacted	DOJ	13,564,411	13,564,410
dos_results_redacted	DOS	13,564,415	13,564,414
USCIS_TX_EXTRACT.CSV	USCIS	13,564,418	13,564,418
vba_redacted	VA	13,555,661	13,555,660
vha_redacted	VA	299,321	299,320

Note: DOD refers to the Department of Defense, DOJ to the Department of Justice, DOS to the Department of State, USCIS to the United States Citizenship and Immigration Services, and VA to the Department of Veterans Affairs.

1 cases these two numbers differ by one because the results files listed in Table
2 2 contain header lines (a header line is a line at the top of a file which contains
3 field information as opposed to data). Notwithstanding header lines, each
4 line of each results file listed in Table 2 contains matching algorithm results
5 applied to a single Texas registered voter.

6 Table 2 includes two files that contain data from the DOD. This reflects
7 the fact that officials at the DOD spread their plaintiff and defendant algo-
8 rithm results across two files. This is noted in “DECLARATION OF Michelle
9 Saunders Rudolph,” and see in particular paragraphs 11-13.

10 With one exception the source files in Table 2 include a field called *vuid*.
11 This field is a Texas voter identification number which I understand is as-

1 signed by a Texas authority to each registered voter in Texas. Such numbers
 2 consist of ten-digit integers. The presence of the void field in multiple files
 3 (all the files listed in Table 2 except for one) allows me to link these files and
 4 in particular to determine the relationships between the rows in the various
 5 source files.

6 The data file supplied by the United States Citizenship and Immigration
 7 Services, hereinafter USCIS, does not contain a void field. Instead this file
 8 contains a field called *var_fill*. On account of this, I extracted values of *var_fill*
 9 and void from the DOS source file on the device, and I appended a void field
 10 to the USCIS data that I extracted from “USCIS_TX_EXTRACT.CSV” us-
 11 ing *var_fill* as a linking variable. There are 13,564,418 records in the USCIS
 12 data file as noted in Table 2, and the operation using *var_fill* and void suc-
 13 cessfully linked all but 16 of them.²

14 Ignoring for the moment the source file titled “vha_redacted,” it is evi-
 15 dent from the files in Table 2 that there is variance in the number of Texas
 16 registered voters contained in each file. This variance is minuscule compared
 17 to 13.5 million, which is approximately the number of registered voters in
 18 Texas according to the files in Table 2. I had to make a choice of which
 19 set of voids to use to conduct my analysis, and I chose the DOJ’s list of
 20 voids. As noted in Table 2 there are 13,564,410 voids in the file named

21 ²The values of *var_fill* for which were not linked are as follows: 1043270vf, 1118270vf,
 22 1308329vf, 1842133vf, 2174100vf, 3173904vf, 3890396vf, 4101251vf, 4593465vf, 4750630vf,
 23 6655642vf, 8006982vf, 7981930vf, 10409123v, 11386580v, and 13218912v.

1 “DOJ_results_redacted,” and henceforth I refer to this file as the DOJ data
 2 file.³ I checked whether the voids in the DOJ data file are unique, and they
 3 are. I also checked whether each void in this file has ten digits, and they
 4 all do. The number 13,564,410 is important insofar as it serves as a divisor
 5 when I describe, for example, the percentage of Texas registered voters who
 6 have valid forms of voter identification.⁴

7 The explanation for Table 2’s low number of Texas registered voters in
 8 the Veterans Health Administration file “vha_redacted” can be found on p.
 9 9, paragraph nine, of the *Declaration of Michael Mims*. Namely, when at the
 10 direction of the DOJ the Veterans Health Administration (VHA) executed
 11 the plaintiff and defendant matching algorithms by comparing a list of Texas
 12 registered voters with a list or lists of individuals who have Veteran Identifi-
 13 cation Cards, the output of such algorithms dropped registered voter records

14 ³The file titled “DOD_results_redacted” contains more lines and registered voters than
 15 “DOJ_results_redacted,” but not all lines in the former are associated with unique voids.
 16 To be precise, there are five voids that are repeated in “DOD_results_redacted,” and these
 17 voids are as follows: 1020955947, 1029588272, 1043042970, 1060125468, and 1078429608.
 18 All of these voids appear twice in “DOD_results_redacted” except for the first void, which
 19 appears three times.

20 ⁴There are four voids that appear in a file named “team_voter_file_other_fields.txt”
 21 (this file appears in the “Source_DOJ” folder on the device) and do not appear in the
 22 DOJ data file. In addition, this same file contains five repeated voids. The voids that
 23 appear in “team_voter_file_other_fields.txt” but not in the DOJ data file are 1055703925,
 24 1173501177, 1190278288, and 1190971476. The five repeated voids that appear in the
 25 former are 1020955947, 1029588272, 1043042970, 1060125468, and 1078429608.

1 that did not match on any of the plaintiff or defendant criteria. That is,
 2 exactly 299,320 Texas registered voters matched VHA records using criteria
 3 specified in either the plaintiff algorithm, the defendant algorithm, or both.

4 Beyond a void and in some cases a var_fill field, the source files in Table 2
 5 include two other types of fields. One type of field contains registered voter
 6 details like first name, last name, street address, residential zip code, and so
 7 forth.⁵ The second type of field contains indicators that describe the results
 8 of applying the plaintiff and defendant algorithms to target databases. For
 9 example, consider the driver's license part of the Texas DPS database; this
 10 is one of the target bases used in the plaintiff algorithm, and the database is
 11 listed in Table 1. Results for applying the plaintiff algorithm to this target
 12 database are contained in the source file "DOJ_results_redacted," and this file
 13 includes many fields that describe the extent to which registered voters in
 14 Texas matched the list of holders of Texas driver's licenses.

15 One such field is called "agdn_match_dl." The prefix "agdn" here refers
 16 to a particular primary sweep, and in the file "doj_results_redacted" val-
 17 ues of the field "agdn_match_dl" are either zero, one, or two. If the value of
 18 "agdn_match_dl" for a particular registered Texas voter were zero, then it fol-
 19 lows that the sweep of the Texas DPS database, driver's license part, did not
 20 find a match based on the identifier called "agdn." If on the other hand the
 21 value of "agdn_match_dl" were one, then the associated Texas registered voter

22 ⁵Registered voter social security numbers are redacted from the source files that I used
 23 in this report.

1 matched with a unique record in the DPS driver's license database. And, if
2 the value of "agdn_match_dl" were two, then the associated Texas registered
3 voter matched to multiple records in the DPS driver's license database based
4 on the "agdn" matching criteria.

5 I wrote a series of SQL scripts that took the source files in Table 2 and
6 from them constructed tables in a mysql database. My scripts read each field
7 in each of the source files. In the process of building my database I did not
8 encounter difficulties opening any of the data files listed in Table 2. There
9 are other files on the device beyond those listed in this table, and I did not
10 encounter any difficulties opening these latter files either.⁶

11 My database includes eight tables, one for each of the source files listed in
12 Table 2. Each table has columns that correspond to the fields in each source
13 file, and each table contains a void field. This latter field enables me to link
14 the tables and assess, for example, whether a registered voter matched to
15 a record in the USCIS source data is also matched to a record in the DOS

16 ⁶I had to process the DOD file named "TEAM.Update.20140526" on account of the
17 way this file was formatted. This file was not pipe-delimited like the other source files
18 listed in Table 2; rather, the fields in "TEAM.Update.20140526" were simply elided when
19 the file was generated. As a consequence of this, the file contains lines of varying length
20 depending on the presence in it of null fields that appear at ends of data lines: to be
21 precise, a "TEAM.Update.20140526" data line that ends with a null field or multiple null
22 fields is shorter than a line ending with numeric fields. I wrote a perl script that extracted
23 the fields from "TEAM.Update.20140526" and formatted the fields so that they were more
24 easily accessible.

1 source file.

2 **Analysis of plaintiff algorithm results**

3 The plaintiff algorithm consists of a set of sweeps across the target databases
4 listed in Table 1. Each sweep specifies different criteria for assessing whether
5 a given registered voter in Texas has a form of identification associated with
6 a given target database. For example, one sweep in the plaintiff algorithm
7 checks whether a Texas registered voter in the TEAM database matches a
8 target record based on first name, last name, gender, date of birth, residen-
9 tial zip code, and residential street number. This set of identifiers is called
10 Combination A, and Combination A, like the other identifier combinations
11 described in the plaintiff algorithm, uses standardized names, date of birth,
12 and so forth. Standardization is described in Part I of the United States
13 Database Matching Protocol. See Appendix A for details.

14 The plaintiff algorithm is broken down into what are called primary
15 sweeps and secondary sweeps, and each sweep is based on identifiers like
16 Combination A just noted. Combination B, for instance, is identical to
17 Combination A except that it does not include a first name field. There
18 are seven primary sweeps when the target database is drawn from the Texas
19 DPS dataset and six when the target database is federal. Each sweep has
20 associated with it its own combination like Combinations A and B.⁷ In prac-

21 ⁷One of the primary sweeps is based on Texas driver's license numbers. To the best

1 tice there are more secondary sweeps than there are identifier combinations.
2 Appendix A includes details on the plaintiff algorithm as implemented, and
3 pp. 13-14 in the appendix explain how secondary sweeps were carried out and
4 enumerates how the numbers of such sweeps varied across federal databases.

5 Briefly, the criteria of the seven (or six when the target database is federal)
6 primary sweeps in the plaintiff algorithm are as follows:

- 7 1. First name, last name, gender, date of birth, residential zip code, resi-
8 dential street number (Combination A).
- 9 2. Last name, gender, date of birth, residential zip code, residential street
10 number (Combination B).
- 11 3. Gender, date of birth, residential zip code, residential street number
12 (Combination C).
- 13 4. First name, last name, date of birth, residential zip, and residential
14 street number (Combination D).
- 15 5. First name, last name, gender, residential zip, and residential street
16 number (Combination E).
- 17 6. First name, last name, gender, and date of birth (Combination F).

18 of my understanding, when registering to vote in Texas, individuals have the option of
19 providing this number to election officials. Texas driver's license numbers do not appear
20 in federal databases, and hence there is one fewer primary sweep in the plaintiff algorithm
21 when the target database is federal than when it is DPS-based.

1 7. Texas driver's license number (Combination M). This sweep is not ap-
2 plicable to federal target databases.

3 Briefly, the criteria of the secondary sweeps in the plaintiff algorithm are
4 as follows:

5 1. First name, middle initial, last name, and date of birth (Combination
6 G).

7 2. Last four digits of social security number, date of birth, and residential
8 zip code (Combination H).

9 3. Last four digits of social security number, first name, last name, and
10 date of birth (Combination I).

11 4. First name, variation of last name, middle initial, and date of birth
12 (Combination K).

13 5. First name, different variation of last name, middle initial, and date of
14 birth (Combination L).

15 6. Full social security number.

16 The secondary sweeps in the plaintiff algorithm allow for some variations in
17 last name. The details can be found in "United States Database Matching
18 Protocol," which is attached to this report as Appendix A.

1 **One-to-one versus one-to-many matches**

2 With respect to a given target database, the plaintiff algorithm keeps track
3 of the extent to which Texas registered voters listed in the TEAM database
4 are matched to a single target record or multiple target records. Suppose
5 a registered voter listed in TEAM is matched on a given sweep to a single
6 record in a single target database; this is an example of a one-to-one match.
7 A registered voter listed in TEAM who on a given sweep matched multiple
8 records in a single target database provides an example of a one-to-many
9 match. For the purpose of my counting the number of Texas registered voters
10 who possess valid forms of voter identification per SB 14, in any given sweep
11 and with respect to any target database, I treat all one-to-one matches and
12 one-to-many matches as matches. For example, when I count the number of
13 Texas registered voters who according to the plaintiff algorithm have valid
14 Texas driver's licenses, for any given sweep I add the number of registered
15 voters who have one-to-one matches with the DPS driver's license database
16 plus the number of registered voters who have one-to-many matches with
17 this database.

18 **Texas-only versus nationwide matches**

19 The plaintiff algorithm allows for records in federal target databases to be di-
20 vided into those with Texas addresses and those with addresses beyond Texas.
21 Then, when a Texas registered voter in the TEAM database is compared in

1 a particular sweep against all records in a given federal target database, the
2 sweep can either be Texas-only (meaning, that only target records with Texas
3 addresses are consulted when comparing a TEAM record to a set of target
4 records) or it can be nationwide (meaning that all records are included). For
5 the purpose of counting the number of Texas registered voters who possess
6 valid forms of voter identification per SB 14, all of my results below use na-
7 tionwide sweeps. This means that a TEAM record can match a federal target
8 record regardless of whether the address of the federal record is located in
9 Texas or not. By allowing federal database matches to include both records
10 with Texas address and records with addresses beyond Texas, I increase the
11 number of registered voters in TEAM reported to have been matched with
12 federal records in the target databases listed in Table 1.

13 **Registered voters matching to records flagged as de-** 14 **ceased**

15 In the four DPS target databases in Table 1, some records are associated
16 with deceased individuals. The plaintiff algorithm seeks to deal with this
17 issue in the following way.

18 With respect to a given DPS database, e.g., the driver's license database
19 which is one of four DPS elements in Table 1, a TEAM record of a Texas
20 registered voter can on a given primary or secondary sweep match a target
21 record that has been flagged by the Texas DPS as being associated with a

1 deceased individual. If this match is one-to-one, then it is said that the regis-
2 tered voter associated with the hypothetical TEAM record is *unambiguously*
3 deceased based on this single DPS database. If the match is one-to-many,
4 and if not all of the target records so hit were flagged by the DPS as being
5 associated with deceased individuals, then the registered voter is said to be
6 *ambiguously* deceased. Note that in principle a TEAM record can be am-
7 biguously deceased based on one of the four DPS datasets yet unambiguously
8 deceased based on another one.

9 Using primary only or both primary and secondary sweeps and based on
10 the four DPS databases in Table 1, I partition the set of registered Texas
11 voters into the following three classes: those who were either not matched to
12 a DPS record at all or who were matched to records that do not have any
13 deceased flags associated with them; those who, when matched to one or more
14 DPS records, were associated with deceased flags that were unambiguous in
15 the sense above that were unambiguous in the sense above and moreover who
16 were never matched in an ambiguous way regarding deceased status in the
17 sense above; and, those who, when matched to at least two DPS records in a
18 given DPS database, have an ambiguous deceased in the sense above. These
19 three sets of Texas registered voters can be said to be unambiguously alive,
20 unambiguously deceased, or ambiguously deceased.

21 Table 3 contains the counts of four types of deceased Texas registered
22 voters. Of particulate note is 45,514, the number of unambiguously deceased
23 registered voters based on primary and secondary sweeps. This number is

Table 3: Counts of deceased Texas registered voters, based on plaintiff algorithm

Category	Count	Percent
Primary sweeps, unambiguous	44,091	0.325
Primary sweeps, ambiguous	3,235	0.023
Primary and secondary sweeps, unambiguous	45,514	0.335
Primary and secondary sweeps, ambiguous	3,238	0.023

Note: reports results of plaintiff algorithm; percents are based on a registered voter pool of size 13,564,410 and are reported to the nearest thousandth.

1 approximately 0.325% of the Texas registered voter pool.

2 Note that a Texas registered voter listed in TEAM can only be unam-
3 biguously deceased or ambiguously deceased if said registered voter matches
4 a record in one or more of the DPS datasets listed in Table 1. Therefore,
5 when either unambiguously deceased or ambiguously deceased records are
6 ignored for the purposes of counting the number of matches between Texas
7 registered voters in the TEAM database and records in the state and federal
8 target databases, the percent of records matched will drop in comparison to
9 the percent that would have been calculated had the unambiguously deceased
10 or ambiguously deceased not been dropped.

11 Results

12 Table 4 contains four counts of the numbers of Texas registered voters who
13 have, or in contrast lack, a valid form of voter identification per my analysis of
14 the plaintiff algorithm. There are four different counts in part because some

- 1 counts include all Texas registered voters and others drop those registered
 2 voters found to be unambiguously deceased.

Table 4: Summary of plaintiff algorithm results

Type	Matches	Non-matches	Match Percent
Primary sweeps	12,119,789	1,444,621	89.34
without deceased	12,075,698	1,444,621	89.31
Primary and secondary sweeps	12,332,170	1,232,240	90.91
without deceased	12,286,656	1,232,240	90.88

Note: reports counts of matches based on either primary or primary and secondary sweeps. The dropped deceased matches are those that are unambiguously deceased. Percentages are reported to the nearest hundredth.

3 Note in Table 4 that, for primary sweeps or for primary and secondary
 4 sweeps, the number of non-matches does not change when unambiguously
 5 deceased registered voters are dropped. This is because only registered voters
 6 who were matched to a record or to records in one of the four DPS databases
 7 can be deemed to be unambiguously deceased in the sense as explained above.

8 According to Table 4's results using primary and secondary sweeps, I find
 9 that approximately 1.2 million registered Texans lack valid voter identifica-
 10 tion as specified in SB 14. This constitutes approximately 9% of the Texas
 11 registered voter pool. A more restrictive interpretation of Table 4 could imply
 12 that the number of Texans who lack valid voter identification is greater.

1 **Race/ethnicity and voter identification**

2 I was also asked by plaintiffs' counsel to explore the relationship between
3 registered voter race/ethnicity in Texas and voter identification possession
4 rates. For the purposes of this section of my report, I consider a Texas
5 registered voter to possess valid voter identification per SB 14 if said voter
6 was matched by either a primary sweep or a secondary sweep of the plaintiff
7 algorithm to any target database listed in Table 1.

8 I note that the data I received on the device do not break down
9 Texas registered voters by racial/ethnic group. There is a field in the file
10 "team_voter_file_other_fields.txt" named "spanish_surname," but this identi-
11 fier cannot assist me with an exercise that needs to classify Texas registered
12 voters as either Hispanic, white, or black.

13 In light of the lack of racial/ethnic information in the data used by the
14 plaintiff algorithm, I sought to classify Texas registered voters using census
15 data.

16 To start, for each Texas registered voter, I extracted his or
17 her residential address from the files "DOJ_results_redacted" and
18 "team_voter_file_other_fields.txt." Both of these files are located in the
19 "Source_DOJ" source folder on the device.⁸ I then sent via email an en-
20 crypted list of vuids and associated addresses to a graduate student whom I
21 hired to determine the census blocks (hereinafter, blocks) of all the Texas reg-

22 ⁸I used both of these files, as opposed to just one of them, because neither file contained
23 complete registered voter residential addresses.

1 istered voters whose residential addresses could be geocoded. Of 13,564,410
 2 Texas registered voters, he returned to me encrypted files which contained the
 3 blocks of 12,191,461 of these voters; this leads to a coverage rate of approx-
 4 imately 89.88%. A description of how the Texas registered voter geocoding
 5 operation was performed can be found in Appendix C.⁹

6 Census blocks are nested within census block groups (hereinafter, block
 7 groups), and the analysis that follows is conducted at the block group level.
 8 Thus, I aggregated by block group all Texas registered voters for whom I had
 9 geocoded addresses; this processes produces for each block group the number
 10 of registered voters and the number of registered voters who possess a valid
 11 for of voter identification per SB 14. There are 15,811 block groups in Texas
 12 as of the 2010 decennial census, and of these 15,767 contain at least one
 13 citizen of voting age. My block group aggregation of Texas registered voters
 14 does not consider individuals whose addresses could not be geocoded. Of
 15 the 15,767 Texas block groups with citizens of voting age, I placed registered
 16 voters into 15,742 block groups.

17 I downloaded the United States Census Bureau database titled “Vot-
 18 ing Age Population by Citizenship and Race (CVAP);” this database is one
 19 element of the 2008-2012 5-Year American Community Survey (ACS).¹⁰ I ex-

20 ⁹I paid the graduate student \$50.00/hour for his geocoding work, which required 20
 21 hours.

22 ¹⁰This database can be found at the following website: [https://www.census.gov/rdo/](https://www.census.gov/rdo/data/voting_age_population_by_citizenship_and_race_cvap.html)
 23 [data/voting_age_population_by_citizenship_and_race_cvap.html](https://www.census.gov/rdo/data/voting_age_population_by_citizenship_and_race_cvap.html) (last accessed
 24 June 25, 2014).

1 tracted the Texas portion of ACS CVAP dataset, and I wrote mysql scripts to
 2 upload the Texas ACS data into my database. I then merged the ACS data
 3 with the block group-aggregated voter registration data described above.

4 The 2008-2012 ACS data breaks down by block group the number of
 5 voting age citizens by race/ethnicity. The 2008-2012 ACS contains data at
 6 higher levels of aggregation than the block group but not at lower levels,
 7 hence the use of block groups in this report as opposed to blocks. I focus on
 8 three racial/ethnic groups: Hispanic, non-Hispanic white, and non-Hispanic
 9 black.¹¹

10 **Racially/ethnically homogeneous and nearly homogeneous block** 11 **group analysis**

12 Some block groups in Texas are homogeneous Hispanic with respect to CVAP,
 13 meaning that all citizens of voting age in said block groups are Hispanic.
 14 Similarly, some block groups in Texas are homogeneous white and others,
 15 homogeneous black. Homogeneous Hispanic (or white or black) block groups
 16 are useful analytically for the following reason. If 80% of registered voters
 17 in a collection of completely homogeneous Hispanic block groups have valid
 18 forms of voter identification per SB 14, then the Hispanic rate of valid vote

19 ¹¹The category of non-Hispanic white refers here to monoracial non-Hispanics who clas-
 20 sify themselves as white; the Census Bureau calls this category, “White Alone.” Similarly,
 21 the category of non-Hispanic black refers to non-Hispanics who classify themselves as
 22 black; the Census Bureau calls this category, “Black or African American Alone.”

1 identification possession in these blocks groups is 80%. Similarly, if 85% of
2 registered voters who live in a collection of homogeneous white block groups
3 have valid forms of voter identification per SB 14, then the white rate of valid
4 voter identification possession in these blocks groups is 85%.

5 The numbers above are purely illustrative, but this example shows why
6 homogeneous block groups are useful: they allow one to characterize a
7 racial/ethnic voter identification possession rate even in the absence of data
8 which specifies the races/ethnicities of registered voters. With this in mind,
9 I determined that there were 137 block groups in Texas that were homoge-
10 neous Hispanic (they contain 64,305 registered voters), 62 conformable block
11 groups that were homogeneous white (containing 31,777 registered voters),
12 and 14 conformable block groups that were homogeneous black (containing
13 7,503 registered voters). A block group is said to be conformable if, one, the
14 number of aggregated registered Texas voters based on geocoded addresses
15 is less than or equal to the number of citizen age residents in the block group
16 according to the American Community Survey and, two, if in the census
17 data the number of Hispanic citizens of voting age plus the number of white
18 citizens of voting age plus the number of black citizens of voting age is no
19 greater than the number of total citizens of voting age. The voter identi-
20 fication possession rates in the homogeneous white, homogeneous Hispanic,
21 and homogeneous black block groups are approximately 0.92, 0.85, and 0.79,
22 respectively.

23 It is conceivable that the valid voter identification possession rates in

1 racially/ethnically homogeneous block groups in Texas may be different than
 2 the rates in non-homogeneous block groups. To address this concern, I con-
 3 sider nearly racially/ethnically homogeneous block groups in addition to the
 4 completely homogeneous ones noted above.

5 The logic behind my consideration of nearly racially/ethnically homoge-
 6 neous block groups is as follows. Consider a hypothetical block group that
 7 has 100 registered voters of whom 99 are white and one, non-white. If exactly
 8 80 of the voters in the block group have valid forms of voter identification,
 9 then the white rate of voter identification possession in the block group can
 10 be no greater than 80/99; if it were greater, then there would be more than 80
 11 registered voters in the block group with valid voter identification. Similarly,
 12 the white rate of valid voter identification can be no smaller than 79/99; if it
 13 were smaller, then, because there is only one non-white in the block group,
 14 it would not be possible to have 80 registered voters in the block group with
 15 valid voter identification. Thus, it must be true in the hypothetical block
 16 group that the white rate of voter identification possession lies in the interval
 17 $[79/99, 80/99]$. This interval is said to *logically bound* the white voter iden-
 18 tification possession rate, and the interval is based on what is known as the
 19 method of bounds.¹² This method produces logical bounds on rates (here,
 20 valid voter identification possession rates) when applied to collections of units
 21 (here, block groups that are nearly racially/ethnically homogeneous). These

22 ¹²See Otis Dudley Duncan and Beverly Davis, “An Alternative to Ecological Correla-
 23 tion,” *American Sociological Review* 18:6. 1953.

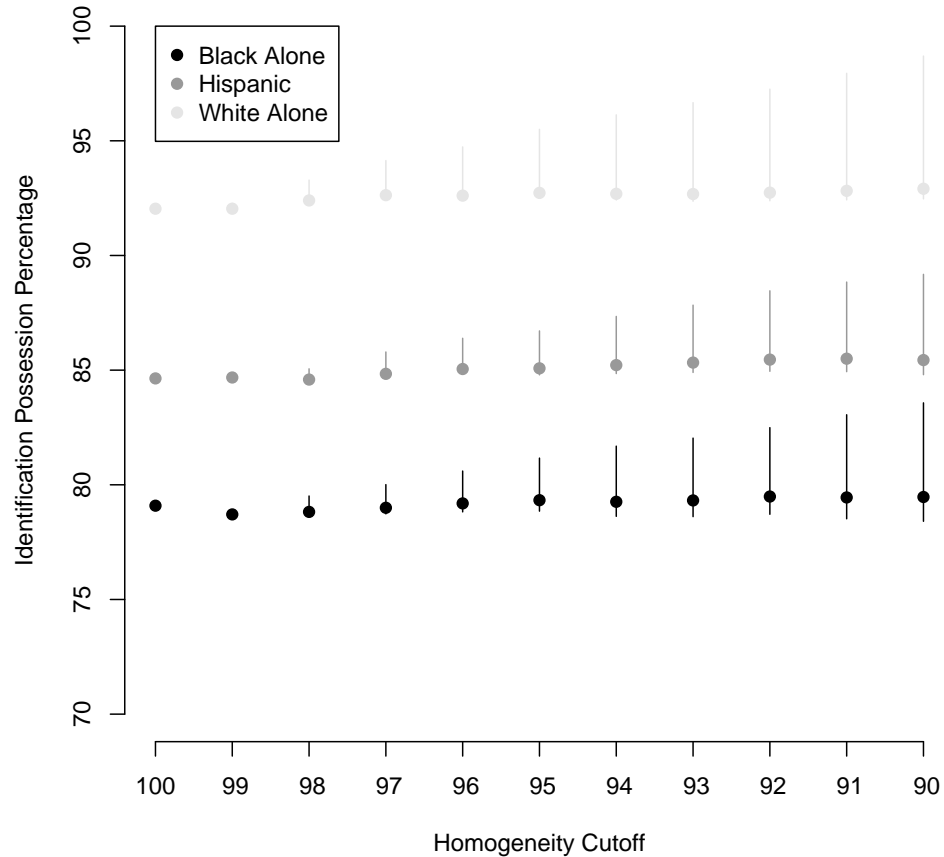
1 calculations are expressed as rates between zero and one, but it is simple to
 2 convert such rates to percentages that lie between zero and one hundred.

3 Note that the endpoints of the above interval—79/99 and 80/99—are
 4 *not* symmetric about 80/100 even though 80/100 is contained in the interval
 5 $[79/99, 80/99]$. Thus, logical bounds are not like confidence intervals that are
 6 centered on a point estimate.

7 To this end, consider Figure 1. For eleven different homogeneity cutoffs
 8 (100% down to 90%), this figure plots logical bounds on valid voter iden-
 9 tification possession rates based on collections of block groups that satisfy
 10 certain homogeneity criteria. The dots in the figure are the valid voter identi-
 11 fication rates in these collections of block groups. The figure's logical bounds
 12 on Hispanic voter identification possession rates are based on collections of
 13 block groups that are at least as homogeneously Hispanic as a given cutoff;
 14 its logical bounds on white voter identification possession rates are based
 15 on collections of block groups that are at least as homogeneously white as
 16 a given cutoff; and, the figure's logical bounds on black voter identification
 17 possession rates are based on collections of block groups that are at least as
 18 homogeneously black as a given cutoff.

19 Consider first the fully racially/ethnically homogeneous block groups, i.e.,
 20 the homogeneity cutoff is 100%. I already presented the valid voter identi-
 21 fication rates for these precincts, and the rates are shown visually in Figure
 22 1. With attention restricted to completely racially/ethnically homogeneous
 23 block groups, the white voter identification possession rate is greater than the

Figure 1: Texas registered voter identification possession rates in homogeneous and nearly homogeneous block groups, based on plaintiff algorithm



Note: describes overall voter identification rates in racially/ethnically homogeneous or nearly homogeneous block groups and logical bounds on corresponding racial/ethnic voter identification possession rates.

- 1 corresponding Hispanic rate which is greater than the corresponding black
- 2 rate.

1 When the homogeneity cutoff is relaxed, i.e., when it is less than 100%,
 2 racial/ethnic voter identification possession rates cannot be known for cer-
 3 tain but can be logically bounded as illustrated above. With the earlier
 4 motivating example in mind, consider three sets of conformable Texas block
 5 groups, those that are at least 99% Hispanic (there are 161 and they contain
 6 78,005 registered voters), those that are 99% or more white (92, with 49,677
 7 registered voters), and those that are 99% or more black (15, with 8,466
 8 registered voters). These three collections of block groups yield three sets
 9 of logical bounds on racial/ethnic valid voter identification possession rates.
 10 The voter identification possession rates in the three collections of nearly (at
 11 least 99%) racially/ethnically homogeneous block groups are shown above
 12 the 99% mark on the horizontal axis in Figure 1, and logical bounds are
 13 plotted as well. The bounds on the 99% collections of block groups are so
 14 tight that they fit under dots in the figure.

15 When the block group homogeneity cutoff is relaxed to 98%, associated
 16 logical bounds on Hispanic, white, and black valid voter identification posses-
 17 sion rates become visible. This is clear in Figure 1 when one looks above the
 18 98% point on the figure's horizontal axis. At 98%, moreover, white bounds
 19 do not overlap corresponding Hispanic bounds; thus, the white valid voter
 20 identification possession rate in block groups at least 98% white is greater
 21 than the Hispanic valid voter identification possession rate in block groups at
 22 least 98% Hispanic. A similar point follows for the black voter identification
 23 rate in block groups at least 98% black.

1 In Figure 1, the widths of the racial/ethnic logical bounds on voter iden-
 2 tification possession rates grows as the homogeneity cutoff approaches 90%
 3 from above. Nonetheless, regardless of the particular cutoff used, the impli-
 4 cation is the same: the rate at which white Texas registered voters possess
 5 valid voter identification is greater than the corresponding Hispanic and black
 6 rates.¹³

7 I created a version of Figure 1 which disregards registered voters who
 8 are unambiguously deceased as this concept has been earlier defined. Such a
 9 second version of the figure is qualitatively identical to the original.

10 **Racial/ethnic regression analysis**

11 I now turn to a block group-level linear regression analysis of voter valid
 12 identification possession rates as characterized by the plaintiff algorithm.
 13 This regression analysis complements the homogeneous and nearly homoge-
 14 neous block group analysis above. The regression uses 11,947 conformable
 15 block groups in total, some of which are racially/ethnically homogeneous,
 16 some nearly homogeneous, and some very heterogeneous. That the regres-
 17 sion analysis uses 11,947 block groups is valuable insofar as its conclusions
 18 do not rest on a smaller subset of Texas block groups. Nonetheless, the key
 19 assumption implicit in the regression analysis—namely, that Hispanic, white,

20 ¹³I made a plot similar to Figure 1 but extended the horizontal axis to 80%. Up to
 21 a homogeneity cutoff of 84% the Hispanic and white rates of valid voter identification
 22 possession are distinguishable and the latter is lower than the former.

1 and black rates of valid voter identification possession rates do not vary by
 2 block group composition—was not invoked in Figure 1. Thus, the earlier ho-
 3 mogeneous and nearly homogeneous block group analysis and the upcoming
 4 regression analysis have different strengths, and a key question is whether
 5 their results are qualitatively different or qualitatively similar.

6 Using 11,947 block groups I estimate a weighted linear regression of voter
 7 identification possession rates based on the plaintiff algorithm on a constant
 8 and two block group-level variables, the fraction of a block group that is
 9 Hispanic and the fraction of a block group that is black. Observations in the
 10 regression were weighted by number of registered voters, and results are in
 11 Table 5.

Table 5:

<i>Dependent variable:</i>	
Voter Identification Percentage	
Hispanic Percentage	−0.083 (0.001)
Black Percentage	−0.124 (0.002)
Constant	94.532 (0.050)
Observations	11,947
R ²	0.428
<i>Note:</i> standard errors in parentheses	

1 According to Table 5, the estimated white rate of valid voter identifi-
 2 cation possession is approximately 94.4% with a 95% confidence interval of
 3 (94.29, 94.49). The corresponding estimated Hispanic rate is approximately
 4 84.6% with a 95% confidence interval of (84.38, 84.75). And, the correspond-
 5 ing estimated black rate is approximately 81.5% with a 95% confidence in-
 6 terval of (81.17, 81.75).

7 I estimated a second version of the regression in Table 5 which disregards
 8 registered voters who are unambiguously deceased as this concept has been
 9 earlier defined. The results of such a regression are qualitatively identical to
 10 those in the table above.

11 I estimated a third version of the regression described in Table 5, this
 12 time restricting attention to conformable block groups in which percentage
 13 Hispanic plus percentage white plus percentage black is at least 97%. This
 14 regression has 7,471 block groups, and its conclusions are qualitatively very
 15 similar to those based on Table 5. In particular, the second regression's
 16 estimated white rate of valid voter identification possession is approximately
 17 93.5% with corresponding Hispanic and black estimated rates of 84.2% and
 18 79.6%, respectively.

19 **Disability provision**

20 SB 14 contains a disability provision. Namely, a Texas registered voter who
 21 the Social Security Administration (SSA) classifies as "in current payment
 22 status for disability" or who the Veterans Administration (VA) classifies as

1 having “a disability rating of 50% or higher” receives special dispensation
2 under SB 14.

3 The device contains two disability databases, one from the SSA (the file
4 is “SSA_results_redacted” in a source folder called “Source_SSA”) and one
5 from the VA (“vba_redacted” in a source folder named “Source_VBA”). The
6 plaintiff algorithm calls for these two disability databases to be studied in the
7 same way that the target databases in Table 1 have been studied. Namely,
8 the plaintiff algorithm assesses whether registered voters appear in disability
9 lists using the primary and secondary sweeps that were discussed previously.

10 As reported earlier in Table 4, across primary and secondary sweeps the
11 match percentage among Texas registered voters is approximately 90.91% if
12 all voters in the TEAM database are considered, and the match is approxi-
13 mately 90.88% if unambiguously deceased registered voters are dropped. If
14 matches for disabilities are treated as matches for valid voter identification,
15 i.e., if one were to assume that all registered Texas who could apply for a dis-
16 ability exemption would so apply and would be granted such an exemption,
17 then these percentages change to 91.76% (includes all registered Texas) and
18 91.73% (drops unambiguously deceased individuals).

19 **Non-matched registered voters in Dallas County, Texas**

20 I was also asked by plaintiffs’ counsel to calculate the number of Texas reg-
21 istered voters in Dallas County who do not have SB 14-qualifying forms of
22 voter identification. In response to this request, I used the plaintiff algorithm

1 to count the number of registered voters per Texas county who have valid
 2 forms of voter identification and the number who lack identification. There
 3 are 254 counties in Texas, and as criteria for having a valid form of voter
 4 identification I used both primary and secondary sweeps.¹⁴

5 According to the TEAM database, there are 1,168,485 registered voters
 6 in Dallas County. Ignoring the issue of deceased individuals, I find that there
 7 were 120,654 registered voters in Dallas County who lack voter identification;
 8 this is approximately 10.33% of the Dallas County registered voter pool. If
 9 individuals who are unambiguously deceased are dropped, then there are
 10 1,162,241 registered voters in Dallas County, of whom approximately 10.38%
 11 lack voter identification.

12 **Analysis of defendant algorithm results**

13 Plaintiffs' counsel also asked me to analyze the defendant matching algorithm
 14 in order to determine if the criteria used in this algorithm yields different re-
 15 sults on valid voter identification possession rates than the plaintiff algorithm.
 16 In this section I provide an analysis which addresses this request.

17 The defendant algorithm is based on a series of five sweeps across the
 18 Texas target databases and federal target databases that are listed in Table 1.

19 ¹⁴To determine the counties of the registered voters in my dataset I relied on the field
 20 named *jur_id* in the file "team_voter_file_other_fields." Dallas County is county 57 per
 21 http://www.window.state.tx.us/taxinfo/tx_county_codes.html (last accessed June
 22 27, 2014).

1 Each sweep specifies different criteria for assessing whether a given registered
 2 voter in Texas has a form of identification associated with a target database.

3 Briefly, the criteria of the five Texas sweeps are as follows:

- 4 1. Last four digits of social security number, last name, and date of birth.
- 5 2. Full social security number.
- 6 3. First name, last name, and date of birth.
- 7 4. First name, middle initial, last name, and date of birth.
- 8 5. Texas drivers license number.

9 For example, an individual from the list of Texas registered voters is said to
 10 match via Texas Sweep 1 on the driver's license portion of the Texas DPS
 11 database if said individual's last four digits of his or her social security num-
 12 ber, his or her last name, and his or her date of birth as listed in the TEAM
 13 database match at least one record in the Texas driver's license database
 14 based on these three fields. Texas Sweep 5 can only be applied to the Texas
 15 DPS databases listed in Table 1 because Texas driver's license numbers do
 16 not appear in the federal databases considered here. Additional details on
 17 the five Texas sweeps are described in "Criteria for Matching Records in the
 18 TEAM Database," and see Appendix B for details.

19 The five Texas sweeps allow for one-to-one, one-to-many, many-to-one,
 20 and many-to-many matches.¹⁵ One consequence of allowing many-to-one

21 ¹⁵The document titled "Criteria for Matching Records in the TEAM Database" contains

1 matches is that multiple registered voters in the TEAM databases can match
 2 to a single record in a target database; this is called a many-to-one match. If
 3 many-to-one matches occur, then the Texas sweeps can in principle report an
 4 excessive number of matches between registered voters and target records.

5 Table 6 contains by sweep and by combinations of sweeps the number of
 6 Texas registered voters whose vuids appear in the DOJ data file and were
 7 matched by the defendant algorithm.

Table 6: Summary of defendant algorithm results

Sweep	Matches
Texas 1	7,374,806
Texas 2	6,178,411
Texas 3	11,643,608
Texas 4	9,522,300
Texas 5	8,613,463
All but Texas 1	12,231,310
All but Texas 2	12,116,612
All but Texas 3	11,980,871
All but Texas 4	12,239,553
All but Texas 5	12,047,835
All	12,250,499

8 Based on the defendant algorithm, the least stringent criteria for valid
 9 voter identification possession posits that a registered Texas voter who
 10 matches on any of the five Texas sweeps has such a form of identification.
 11 the following passage: “Notes: For each ID/Database combination outlined above all
 12 specified matching queries should be run. Based on the matching algorithms, if a record
 13 (registrant) in the TEAM database matches a record in the database being searched, then
 14 this will be denoted as a match.”

1 This criterion finds that 12,250,499 Texas registered voters had such forms
2 of identification. According to the DOJ data file and Table 2, there were
3 13,564,410 registered voters in Texas. Thus, according to the defendant's
4 algorithm, the difference between this number and the number of Texas reg-
5 istered voters who have valid forms of voter identification is 1,313,921. Ac-
6 cording to the most conservative estimate of voter identification possession
7 based on the defendant algorithm, it follows that approximately 1.3 million
8 registered voters in Texas lack valid forms of voter identification. Note that
9 12,250,499 is approximately 90.31% of 13,564,420; thus, according to the least
10 stringent interpretation of the defendant algorithm, approximately 9.69% of
11 Texas registered voters do not have valid forms of voter identification.

12 **Racially/ethnically homogeneous and nearly homogeneous block**
13 **group analysis**

14 In my analysis of the plaintiff algorithm I considered the extent to which
15 voter identification possession rates vary by racial/ethnic groups in Texas.
16 Based on the assumption that a registered voter who matches on any of the
17 five Texas sweeps possesses a valid form of voter identification, I follow a
18 procedure for a racial/ethnic analysis of the defendant algorithm identical to
19 that carried out earlier when I analyzed the results of the plaintiff algorithm.

20 As in the analysis of the plaintiff algorithm, my racial/ethnic analysis of
21 the defendant algorithm is broken into two parts. The first part is based
22 on a plot of racially/ethnically homogeneous and nearly homogeneous block

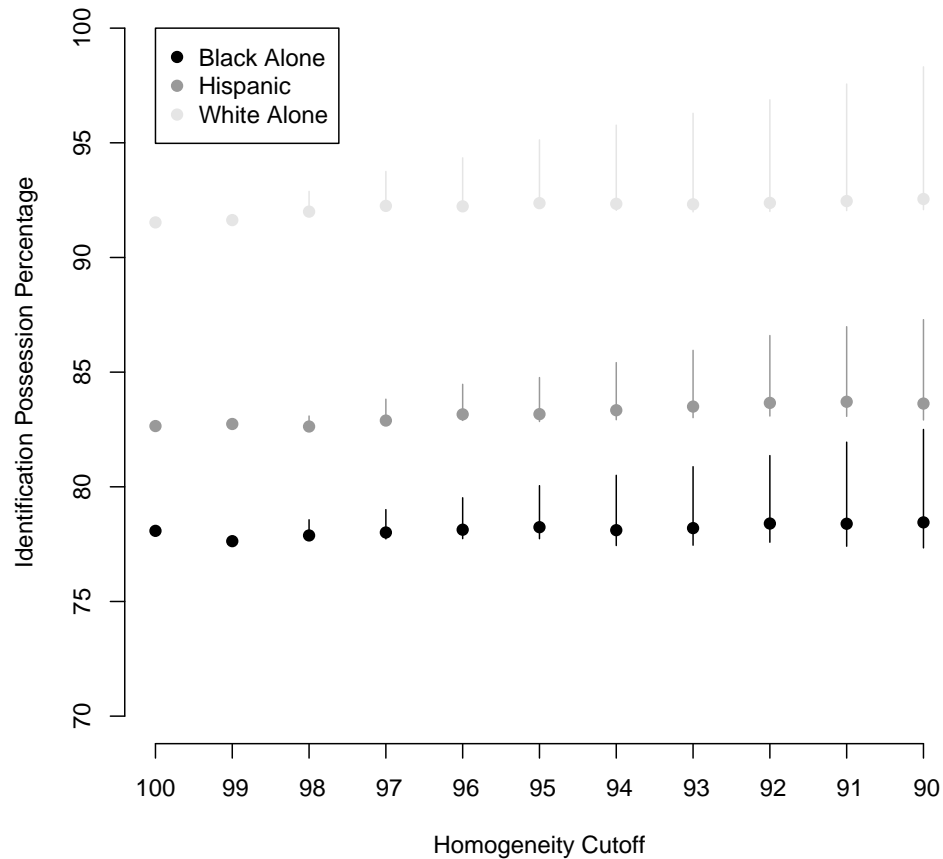
1 groups in Texas. The second is based on a regression model which covers
2 11,947 block groups in Texas.

3 Based on the defendant algorithm, Figure 2 describes the percentages
4 in racially/ethnically homogeneous and nearly homogeneous block groups of
5 Texas registered voters who possess valid forms of voter identification. This
6 figure parallels the previous Figure 1 in my analysis of the plaintiff algorithm.

7 Consider first Figure 2's depiction of completely racially/ethnically ho-
8 mogeneous and conformable block groups in Texas. These block groups
9 are analyzed in the portion of the figure where the homogeneity cutoff on
10 the figure's horizontal axis is 100%. Figure 2 shows that the percentage
11 of white registered voters in Texas who possess valid forms of voter iden-
12 tification is approximately 91%. Corresponding Hispanic and black per-
13 centages are approximately 80% and 77.5%, respectively. In other words,
14 in fully racially/ethnically homogeneous and conformable block groups in
15 Texas, white registered voters have greater voter identification possession
16 rates than Hispanic and black registered voters.

17 As in my earlier analysis of the plaintiff algorithm, relaxing the cutoff for
18 racial/ethnic homogeneity introduces a degree of uncertainty as to true white,
19 Hispanic, and black voter identification possession percentages. This uncer-
20 tainty reflects the fact that, in a block group that is 99% white, one cannot
21 be completely certain that voter identification rates in the block group reflect
22 *white* voter identification rates. That is to say, the presence of non-whites in
23 a nearly racially/ethnically homogeneous block group confounds my ability

Figure 2: Texas registered voter identification possession rates in homogeneous and nearly homogeneous block groups, based on defendant algorithm



Note: describes overall voter identification rates in racially/ethnically homogeneous or nearly homogeneous block groups and logical bounds on corresponding racial/ethnic voter identification possession rates.

- 1 to characterize the voter identification possession rates of white registered
- 2 voters. As discussed previously, however, the degree of uncertainty caused

1 by the fact that nearly homogeneous block groups are not fully homogeneous
 2 is captured in Figure 2 by the logical bounds around percentages of Texas
 3 registered voters who do not possess valid forms of voter identification. Re-
 4 call that logical bounds provide intervals in which rates of interest, i.e., the
 5 white voter identification possession rate, must lie.

6 For every value of the homogeneity cutoff considered in Figure 2, the
 7 percentage of white registered voters in Texas who possess valid forms of voter
 8 identification can be distinguished from both Hispanic and black percentages;
 9 moreover, the white voter identification possession percentage is greater than
 10 corresponding black and Hispanic percentages.¹⁶ This is evident in Figure
 11 2 insofar as logical bounds on various white voter identification possession
 12 percentages do not overlap corresponding logical bounds on Hispanic and
 13 black percentages. When the homogeneity cutoff is less than or equal to 92%,
 14 logical bounds on Hispanic and black voter identification percentages overlap
 15 and thus underlying Hispanic and black valid voter identification possession
 16 rates cannot be distinguished from each other. Still, both Hispanic and black
 17 identification possession rates are less than corresponding white rates even
 18 when the black and Hispanic percentages cannot be distinguished.

19 The implication of Figure 2 is straightforward. Based on

20 ¹⁶I created a version of Figure 2 that allows the homogeneity cutoff to decrease to 80%.
 21 This result holds in the 80% figure up to the homogeneity cutoff of 81%. When the cutoff
 22 is lower than 81%, white and Hispanic rates of valid voter identification possession cannot
 23 be distinguished.

1 racially/ethnically homogeneous and nearly homogeneous and conformable
 2 block groups, white registered voters in Texas are more likely to possess valid
 3 forms of voter identification than Hispanic or black registered voters in the
 4 state.

5 I created a version of Figure 2 which disregards registered voters who
 6 are unambiguously deceased as this concept has been earlier defined. Such a
 7 second version of the figure is qualitatively identical to the original.¹⁷

8 **Racial/ethnic regression analysis**

9 The results of Figure 2 are clear, but one limitation implicit in the figure
 10 is its reliance on racially/ethnically homogeneous and nearly homogeneous
 11 block groups. Thus, Table 7 reports the results of estimating a weighted
 12 linear regression of voter identification possession percentages on block group
 13 racial/ethnic composition. The regression uses 11,947 block groups in Texas
 14 and is not restricted to homogeneous or nearly homogeneous block groups.
 15 The regression is weighted by registered voters per census block because its
 16 dependent variable is itself a percentage that is normalized by registered
 17 voters per census block group.

18 The omitted category in the regression reported in Table 7 is white per-

19 ¹⁷The plaintiff algorithm fields used to characterize the potentially deceased status of
 20 Texas registered voters are found in the file “texas_results_redacted.” The names of the
 21 fields are, for example, “dead_sld_dl,” which describes the extent to which a registered
 22 voter in the TEAM database was matched via Texas Sweep 1 to a record in the driver’s
 23 license part of the DPS database.

Table 7:

	<i>Dependent variable:</i>
	Voter Identification Possession Percentage
Hispanic Percentage	−0.098 (0.001)
Black Percentage	−0.129 (0.002)
Constant	94.388 (0.051)
Observations	11,947
R ²	0.466

Note: standard errors in parentheses

1 centage (approximately; across the 11,947 census block groups used in the
2 regression, the average sum of white percentage plus Hispanic percentage
3 plus black percentage is 96.12 ($s = 6.08$).) Thus, the estimated intercept
4 in the table implies that the estimated percentage of white registered voters
5 who possess valid forms of voter identification is approximately 94.4 percent.
6 A 95% confidence interval for this quantity is (94.29, 94.49).

7 Table 7's estimates of the percentages of Hispanic and black registered
8 voters in Texas who possess valid forms of voter identification are approx-
9 imately 84.6% with an associated 95% confidence interval of (82.38, 84.75)
10 and 81.46% with an associated confidence interval of (81.17, 81.75), respec-
11 tively. Moreover, the Hispanic and black estimates in Table 7 are statistically

1 distinguishable at the 0.05 level ($z \approx 16.45$).

2 The implication of Table 7 is as follows. White registered voters in Texas
3 have a statistically significantly greater likelihood of possessing a valid form of
4 voter identification compared to Hispanic registered voters in the state; and,
5 Hispanic registered voters in Texas have a statistically significantly greater
6 likelihood of possessing a valid form of voter identification compared to black
7 registered voters in the state. This ordering parallels the ordering seen earlier
8 (see Figure 2) in the homogeneous and nearly homogeneous census block
9 analysis of the defendant algorithm.

10 I estimated a second version of the regression in Table 7 which disregards
11 registered voters who are unambiguously deceased as this concept has been
12 earlier defined. The results of such a regression are qualitatively identical to
13 those in the table above.

14 I estimated a third version of the regression described in Table 7, this
15 time restricting attention to conformable block groups in which percentage
16 Hispanic plus percentage white plus percentage black is at least 97%. This
17 regression has 7,471 block groups, and its conclusions are qualitatively very
18 similar to those based on Table 5. In particular, the second regression's
19 estimated white rate of valid voter identification possession is approximately
20 93% with corresponding Hispanic and black estimated rates of 84% and 80%,
21 respectively.

1 **Conclusion**

2 My analysis finds that well over a million registered Texans do not appear
3 to have been issued SB 14-qualifying forms of voter identification. This con-
4 clusion does not depend on whether I use the results of a plaintiff matching
5 algorithm or the results of a defendant matching algorithm to analyze the
6 database of Texas registered voters. In addition, I find with two different an-
7 alytical approaches that white registered voters in Texas possess valid forms
8 of voter identification at a higher rate than Hispanic and black registered
9 voters in the state.

1 A United States Database Matching Protocol

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs,

V.

Civil Action No. 2:13-cv-193 (NGR)

RICK PERRY, *et al.*,

Defendants.

UNITED STATES OF AMERICA,

Plaintiff,

TEXAS LEAGUE OF YOUNG VOTERS
EDUCATION FUND, *et al.*,

Plaintiff-Intervenors,

Civil Action No. 2:13-cv-263 (NGR)

TEXAS ASSOCIATION OF HISPANIC
COUNTY JUDGES AND COUNTY
COMMISSIONERS, *et al.*,

Plaintiff-Intervenors,

V.

STATE OF TEXAS, *et al.*,

Defendants.

1

TEXAS STATE CONFERENCE OF NAACP
BRANCHES, *et al.*,

Plaintiffs,

v.

NANDITA BERRY, *et al.*,

Defendants.

Civil Action No. 2:13-cv-291 (NGR)

BELINDA ORTIZ, *et al.*,

Plaintiffs,

v.

STATE OF TEXAS, *et al.*,

Defendants

Civil Action No. 2:13-cv-348 (NGR)

United States' Database Matching Protocol

The United States hereby sets out its protocol for comparisons among and between the Texas databases and the federal databases. The matching process proceeds in four parts, which are explained in detail below. *First*, databases are prepared and standardized. *Second*, identifier values are constructed by combining multiple individual fields. *Third*, one-to-many matches are conducted between databases. *Fourth*, Texas data concerning deceased individuals is appended to matching output. Each of the four parts is divided into multiple stages, which in turn are divided into concrete steps.

The database preparation and standardization steps below apply to both the matches requested by the United States and all Plaintiffs, as well as the matches requested by Defendants.

GLOSSARY

The following definitions apply to the terms used in this document.

- **Disability database:** Any federal database containing records that indicate whether an individual has a disability that would permit that individual apply for an exemption from the SB 14 identification requirement.
- **Identification database:** Any Texas or federal database containing records that indicate whether an individual has identification required by SB 14 in most cases to cast an in-person ballot
- **Protocol:** The instructions to prepare data for matching and to conduct multiple matching sweeps between databases according to specified search criteria.
- **Sweep:** A comparison of a set of database fields in the TEAM database against a set of database fields in a disability database or an identification database.
- **TEAM database:** The Texas Election Administration Management database, the state database that contains records of registered voters.

PART I: DATABASE PREPARATION

Stage 1: Extraction of Available Data from TEAM, Identification & Disability Databases

- Step 1.1.1:** Extract complete name into separate first name, middle name, and last name fields.
- Step 1.1.2:** Extract date of birth.
- Step 1.1.3:** Extract gender.
- Step 1.1.4:** Extract residential address and mailing address.
- Step 1.1.5:** Extract social security number.
- Step 1.1.6:** Extract Texas driver license number (only if present in Federal database).
- Step 1.1.7:** Extract unique record identifier (such as VUID in the TEAM database).

Stage 2: Separate Valid Identification and Disability Records

- Step 1.2.1:** Remove records from identification database extracts that indicate that an ID has been revoked or has expired more than 60 days before the date of the TEAM database snapshot (which is January 15, 2014).
- Step 1.2.2:** Remove records from disability database extracts that do not indicate current disability status or indicate a Veterans Administration disability rating of less than 50%.
- Step 1.2.3:** Separate the identification databases produced by the State of Texas into separate files for each form of state identification at issue, namely driver licenses, identification cards, licenses to carry concealed handguns, and election identification certificates.

1

Stage 3: Diagnostics

- Step 1.3.1:** Report the frequency of missing values for each field.
- Step 1.3.2:** Report the frequencies of invalid Social Security numbers, such as 111111111 and 123456789.
- Step 1.3.3:** Report the frequencies of likely invalid dates of birth, such as January 1, 1901 and November 11, 1911.

Stage 4: Standardize Last Name

- Step 1.4.1:** Remove last name suffixes that are contained within the last name field, rather than a distinct suffix field. *E.g.*, <Smith Jr.> becomes <Smith>.
- Step 1.4.2:** For last names containing hyphens, populate separate last name fields for all parts of the last name. *E.g.*, the last name <Smith-Jones> would have the value <Smith> entered into a LastName1 field and the value <Jones> entered into a LastName2 field.
- Step 1.4.3:** Remove spaces, hyphens, periods, and apostrophes from all last name fields and convert all letters to uppercase. *E.g.*, <O'Connor> becomes <OCONNOR> and <Smith-Jones> becomes <SMITHJONES>.
- Step 1.4.4:** Code all missing values as blank fields.

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Stage 5: Standardize First Name and Middle Name

Step 1.5.1: Remove spaces, hyphens, periods, and apostrophes from the first name field and convert all letters to uppercase. *E.g.*, <Jean-Paul> becomes <JEANPAUL>.

Step 1.5.2: Parse the first letter of the middle name (if available) and use it to populate a middle initial field. *E.g.*, <John> would yield <J>.¹

Step 1.5.3: Code all missing values as blank fields.

Stage 6: Standardize Date of Birth

Step 1.6.1: Convert the date of birth to an eight-digit string of MMDDYYYY.

Step 1.6.2: Code all missing values as blank fields.

Stage 7: Standardize Gender

Step 1.7.1: Code gender as a string of 1 for females and 0 for males.

Step 1.7.2: Fill missing gender values using the most common gender value for the first name associated with a record. *E.g.*, if 99% of records with first name <JOHN> are listed as male, assign the male identifier to all records with first name <JOHN> and no listed gender.

Step 1.7.3: If missing values remain, code all missing values as blank fields.

¹ The U.S. Department of State does not maintain a separate field for middle names in its database of U.S. Passport and Passport Card holders. Instead, both first and middle name may be stored in the first name field. For this database, the following rule will be applied: treat the first word in the first name field as the first name, and treat the first letter following the first space as the middle initial.

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Stage 8: Standardize Address

- Step 1.8.1:** Convert the residential ZIP code to a string if it is stored as a numeric field.
- Step 1.8.2:** Where the residential address ZIP code is blank, populate that field with the value in the mailing address ZIP code field, if available.²
- Step 1.8.3:** Truncate the residential ZIP code field to the first five digits. *E.g.*, <77777-1234> becomes <77777>.
- Step 1.8.4:** Where the residential address field is blank, populate that field with the value in the mailing address field, if available.
- Step 1.8.5:** Where address field containing street address begins with a street number, isolate the street number. *E.g.*, <123 Main Street> becomes <123>.
- Step 1.8.6:** Where the address field begins with recognized strings indicating a mail box, eliminate strings to isolate the box number. *E.g.*, <PO Box 444> becomes <444>.
- Step 1.8.7:** If missing values remain, code all missing values as blank fields.

Stage 9: Standardize Social Security Number

- Step 1.9.1:** Convert the social security number to a string if it is stored as a numeric field.
- Step 1.9.2:** Using full social security number, check for invalid SSNs. In the case of invalid SSNs, code as missing. *E.g.*, <123456789> becomes <>.

² For purposes of this database matching protocol, the only address fields utilized with respect to data regarding U.S. Passports and U.S. Passport Cards are those regarding mailing addresses.

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Step 1.9.3: Extract the last four digits of full social security number as a four-character string and use them to populate a separate SSN4 field.

Step 1.9.4: Code all missing values as blank fields.

Stage 10: Identical Records

Step 1.10.1: For the TEAM database, for the small number of records with different VUID but identical first and last name, gender, residential address number and ZIP, date of birth, and SSN, treat these records as identical.

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PART II: DATABASE PREPARATION**Stage 1: Construct Primary Identifier Variables for United States' One-to-Many Sweeps**

- Step 2.1.1:** Create Combination A: First Name + Last Name + Gender + Date of Birth + Residential ZIP + Residential Street Number. *E.g.*, the separate fields <JEAN>, <SMITH>, <0>, <01011950>, <77777>, and <123> are combined to a single field <JEANSMITH00101195077777123>.³
- Step 2.1.2:** Create Combination B: Last Name + Gender + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.3:** Create Combination C: Gender + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.4:** Create Combination D: First Name + Last Name + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.5:** Create Combination E: First Name + Last Name + Gender + Residential ZIP + Residential Street Number.
- Step 2.1.6:** Create Combination F: First Name + Last Name + Gender + Date of Birth.
- Step 2.1.7:** Create Combination M: Texas Driver License Number (where available).

³ For the U.S. Department of State only, the name portion of any combination is truncated if it is more than 32 characters long.

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Stage 2: Construct Secondary Identifier Variables for United States' One-to-Many Sweeps

- Step 2.2.1:** Create Combination G: First Name + Middle Initial + Last Name + Date of Birth.⁴
- Step 2.2.2:** Create Combination H: SSN4 + Date of Birth + Residential ZIP.
- Step 2.2.3:** Create Combination I: SSN4 + First Name + Last Name + Date of Birth.
- Step 2.2.4:** Create Combination K: First Name + Last Name 1 + Middle Initial + Date of Birth.
- Step 2.2.5:** Create Combination L: First Name + Last Name 2 + Middle Initial + Date of Birth.
- Step 2.2.6:** Full Social Security Number.

Stage 3: Establish Identifier Uniqueness

- Step 2.3.1:** Within the TEAM database, determine the uniqueness of each primary and secondary identifier variable and mark accordingly. *E.g.*, if only one record has the string <JEANSMITH0101195001237777> for Combination A, mark that record as unique for Combination A. By contrast, if multiple records have the string <JOHNSMITHA0101950> for Combination G, mark all such records as non-unique for Combination G.
- Step 2.3.2:** Within the identification and disability databases, generate a field that establishes the uniqueness of each identifier variable. For federal databases, for each combination, generate a field that establishes

⁴ Only for the State Department, create three further variations of Combination G using the State Department's "LFMName" field which contains Last, First, and Middle Names, in that order, truncated to a maximum length of 32 characters. Combination G1 is DOB + LFMName; Combination G2 is DOB + First two words of LFMName; and Combination G3 is DOB + First two words of LFMName + First character of third word of LFMName.

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uniqueness among only Texas records and a field that establishes uniqueness among nationwide records. *E.g.*, if only one record has the string <JEANSMITH0101195001237777> for Combination A, populate the uniqueness field for Combination A for that record as <1>. If four records have the string <JOHNSMITHA0101950> for Combination G, populate the uniqueness field for Combination G for each of those records as <2>, which indicates any number greater than one.

PART III: MATCH DATABASES

Stage 1: United States' Primary One-to-Many Matching Sweeps

- Step 3.1.1:** For each case in which Combination A is unique in the TEAM database, match Combination A against Combination A in the identification or disability database. For federal databases, use only the subset of records with Texas addresses in the identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination A output field. Where there is a match, indicate the uniqueness of Combination A in the identification or disability database in the Combination A output field (*e.g.*, in cases where there is one matching record in the Federal database, <1> should be inserted into the Combination A output field, while a <2> should be inserted into the Combination A output field if the TEAM record matched 2 or more records in the Federal database).
- Step 3.1.2:** Use the procedure in Step 3.1.1 to match Combination B, Combination C, Combination D, Combination E, and Combination F in the TEAM database against the equivalent combination field in the identification or disability database.
- Step 3.1.3:** Use the procedure in Step 3.1.1 to match Combination M in the TEAM database against the equivalent combination field in the identification databases produced by the State of Texas.

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Stage 2: United States' Secondary One-to-Many Matching Sweeps

Step 3.2.1: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), and where Combination G is unique in the TEAM database, match Combination G against Combination G in the identification or disability database. For federal databases, use only the subset of records with Texas addresses in the identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination G output field. Where there is a match, indicate the uniqueness of Combination G in the identification or disability database in the Combination G output field (*e.g.*, <1> if a unique match and <2> if matched to more than one record).

Step 3.2.2: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination H, Combination I, and complete social security number⁵ in the TEAM database against the equivalent combination/field in the identification or disability database.

Step 3.2.3: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination K against Combination G, Combination K, and Combination L in the identification or disability database.

⁵ The full social security number is not created as a separate "combination" as it is its own field stored within the TEAM database under the field name "ssn".

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Step 3.2.4: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination L against Combination G, Combination K, and Combination L in the identification or disability database.

Stage 3: United States' Nationwide Federal Database Sweeps

Step 3.3.1: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, and where Combination F is unique, match Combination F against Combination F in the nationwide identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination F nationwide output field. Where there is a match, indicate the uniqueness of Combination F in the identification or disability database in the Combination F nationwide output field (*e.g.*, <1> if a unique match and <2> if matched to more than one record).

Step 3.3.2: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination G, Combination I, and full social security number in the TEAM database against the equivalent combination/field in the nationwide identification or disability database.

Step 3.3.3: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination

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K against Combination G, Combination K, and Combination L in the nationwide identification or disability database.

Step 3.3.4: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination L against Combination G, Combination K, and Combination L in the nationwide identification or disability database.⁶

⁶ Step 3.3.5 for the State Department only: Match the following Combination G variations from applicable State Department records, first to include only the subset of records with Texas addresses, and then to include all applicable U.S. Passport and Passport Card records nationwide (*e.g.*, without Texas addresses), against the following fields from the TEAM database:

- Combination G1 to DOB + Last_fix + First_fix + Middle_name from the TEAM database;
- Combination G2 to DOB + Last_fix + First_fix from the TEAM database;
- Combination G2 to DOB + Last_fix + First word of First_name from the TEAM database;
- Combination G3 to DOB + Last_fix + First_fix + Middle_Initial from the TEAM database;
- Combination G3 to DOB + Last_fix + First word of First_name + Middle_Initial from the TEAM database; and
- Combination G3 to DOB + Last_fix + First word of First_name + First character of Second word of First_fix from the TEAM database.

Attempt matches for all TEAM records, regardless of whether they matched in any prior sweeps. Indicate <1> if a unique match and <2> if matched to more than one record.

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PART IV: DATA GATHERING

Stage 1: Gather Information Regarding Deceased Individuals

- Step 4.1.1:** In all instances in which a unique match was achieved between the TEAM database and the Texas Driver License, Texas Identification Card, and Texas Concealed Handgun database, determine whether the identification record at issue has been flagged as deceased in the Texas identification database.
- Step 4.1.2:** Where the driver license, concealed handgun license, or Texas identification card record at issue has been flagged as deceased, append the “deceased” flag to the TEAM record to which the unique match has been made.

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B
Defendant matching algorithm

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Criteria for Matching Records in the TEAM Database

ID Matching			
Database	Valid ID	Matching Algorithm(s)	Additional Parameters
Texas Dept. of Public Safety	Driver's License	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Personal Identification Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Concealed Handgun License	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Texas Election Identification Certificate	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
U.S. Department of Defense	Military ID-Common Access Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Military ID- Uniformed Services ID Cards	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Military ID- DOD Civilian Retiree Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted

U.S. Dept. of Veterans Affairs	Veterans Affairs ID Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None.
U.S. Dept. of Homeland Security	U.S. Certificate of Citizenship	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None
	U.S. Certificate of Naturalization	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None
U.S. State Department	U.S. Passport	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	U.S. Passport Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
Permanent Exemptions			
U.S. Social Security Administration	N/A	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	Determined to have a disability
U.S. Department of Veterans Affairs	N/A	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	Disability rating of 50% or more

Notes:

For each ID/Database combination outlined above all specified matching queries should be run. Based on the matching algorithms, if a record (registrant) in the TEAM database matches a record in the database being searched, then this will be denoted as a match (For any given type of SB14 ID, a registrant will be determined to have valid ID if matched by any of the matching algorithms outlined). New fields will be added to the TEAM database to denote the presence of a match for each database/ID/query. In addition to searching for ID possession, records in the TEAM database will be flagged to indicate the registrant is exempt due to the presence of a qualified disability. (Disclaimer: The matching algorithms here denoted are based on data fields currently known to populate the listed databases).

Explanation of matching queries to be run (numbers correspond to matching algorithms in table above):

1. Records will be matched using the last four digits of the Social Security Number (where available) along with the last name and date of birth fields.
2. Records will be matched using the full Social Security Number field (where available).
3. Records will be matched using the first name, last name, and date of birth fields.
4. Records will be matched using the first name, middle initial, last name, and date of birth fields.
5. Records will be matched using the Texas Driver's License Number field (where available).

1 C Description of geocoding exercise

2 To geocode addresses, my assistant followed a procedure recommended by
3 the United States Census Bureau; this procedure is described here: [http:](http://www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf)
4 [//www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf](http://www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf).

5 I asked the assistant to describe in detail what he did, and his description
6 is as follows:

7 I downloaded the most recent Address Range Feature shapefiles for each
8 Texas county from the Census FTP servers, then loaded them into ArcGIS
9 10.2 and merged them together into one file. I used this file to create an
10 Address Locator file in ArcGIS, using the “US Address Dual Ranges” style,
11 which matches on street number, street name, and ZIP code.

12 Next, I broke the Texas voter file into separate files 500,000 addresses
13 long to ease the computational load, and used the Geocode Addresses tool
14 along with my Address Locator to match each address to a set of latitude
15 and longitude coordinates. The default settings were used in this process.

16 For the final step, I downloaded the 2010 Census block file for Texas
17 from the Census FTP servers, and used the Spatial Join tool to match the
18 geographic coordinates to Census blocks for each address, using the match
19 option of “HAVE_THEIR_CENTER_IN.” I then exported the attribute table
20 from each resulting shapefile, and reduced them down to just the relevant
21 columns for Professor Herrons analysis.

22 The same process was followed for mailing addresses, although I excluded

1 voters who had a P.O. Box for a mailing address, since ArcGIS would not
2 be able to geocode them, and I did not re-geocode voters who had match-
3 ing residential and mailing addresses, instead choosing to carry over their
4 coordinates and Census blocks from the previous operation.

5 After the geocoding process was completed, I encrypted the resulting text
6 files, and emailed them to Professor Herron.

1 D Michael Herron curriculum vitae

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Academic Appointments

William Clinton Story Remsen 1943 Professor, Department of Government, Dartmouth College. July, 2013 – present.

Professor, Department of Government, Dartmouth College. July, 2009 – June, 2013.

Visiting Professor of Applied Methods, Hertie School of Governance, Berlin, Germany. August, 2011 – August, 2012.

Associate Professor, Department of Government, Dartmouth College. July, 2004 – June, 2009.

Visiting Associate Professor, Department of Government, Harvard University. July, 2008 – January, 2009.

Visiting Associate Professor, Wallis Institute of Political Economy, University of Rochester. September, 2006 – December, 2006.

Visiting Assistant Professor, Department of Government, Dartmouth College. July, 2003 – June, 2004.

Assistant Professor, Department of Political Science, Northwestern University. September, 1997 – June, 2004.

Faculty Associate, Institute for Policy Research, Northwestern University. September, 2002 – June, 2004.

Education

PhD Business (Political Economics), Stanford University, January, 1998.

Dissertation: Political Uncertainty and the Prices of Financial Assets

Committee: David Baron, Darrell Duffie, Douglas Rivers, and Barry Weingast

MS Statistics, Stanford University, June, 1995.

MA Political Science, University of Dayton, August, 1992.

BS Mathematics and Economics, with University Honors, Carnegie Mellon University, May, 1989.

Fellowships

Elizabeth R. and Robert A. Jeffe 1972 Fellowship, Dartmouth College. September, 2010 – June, 2011.

Fulbright Scholar Program fellowship for research and teaching at the Heidelberg Center for American Studies, Heidelberg University, September, 2009 - February, 2010 (declined).

Post-doctoral Research Fellow, Center for Basic Research in the Social Sciences, Harvard University. September, 2000 – August, 2001.

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Michael C. Herron

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Publications

Journal Articles

"A Careful Look at Modern Case Selection Methods" (with Kevin M. Quinn). Forthcoming, *Sociological Methods & Research*.

"Race, Party, and the Consequences of Restricting Early Voting in Florida in the 2012 General Election," (with Daniel A. Smith). Forthcoming, *Political Research Quarterly* and available at <http://prq.sagepub.com/content/early/2014/02/21/1065912914524831?papetoc>.

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"Economic Crisis, Iraq, and Race: A Study of the 2008 Presidential Election" (with Seth J. Hill and Jeffrey B. Lewis). *Election Law Journal* 9(1): 41-62. 2010.

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"Did Ralph Nader Spoil Al Gore's Presidential Bid? A Ballot-Level Study of Green and Reform Party Voters in the 2000 Presidential Election" (with Jeffrey B. Lewis). *Quarterly Journal of Political Science* 2(3): 205-226. 2007.

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"Government Redistribution in the Shadow of Legislative Elections: A Study of the Illinois Member Initiatives Grant Program" (with Brett A. Theodos). *Legislative Studies Quarterly* 24(2): 287-312. 2004.

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4

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"Ohio 2004 Election: Turnout, Residual Votes and Votes in Precincts and Wards" (with Walter R. Mebane, Jr.), in "Democracy At Risk: The 2004 Election in Ohio," report published by the Democratic National Committee. 2005.

"Poisson Regression." *The Encyclopedia of Social Science Research Methods*, Alan Bryman, Michael Lewis-Beck, and Tim Futing Liao, eds. Thousand Oaks, CA: Sage Publications, 2003.

"Pork barrel race to the bottom" (with Brett A. Theodos). *Illinois Issues* 29(2): 22-23. 2003.

"Teaching Introductory Probability Theory." *The Political Methodologist* 10(2): 2-4. 2002.

"Ballot cost Gore thousands of votes" (with Henry E. Brady and Jonathan N. Wand). *The San Diego Union-Tribune*, p. G3, November 19, 2000.

Work in Progress

"Race, Shelby County, and the Voter Information Verification Act in North Carolina" (with Daniel A. Smith).

"Precinct Closing and Wait Times in Florida during the 2012 General Election" (with Daniel A. Smith).

Awards

Best Paper Award, State Politics and Policy Section, 2012 Annual Meeting of the American Political Science Association. *Getting Your Souls to the Polls: The Racial Impact of Reducing Early In-Person Voting in Florida* (with Daniel A. Smith).

Grants

The Rockefeller Center for Public Policy and the Social Sciences, May, 2006. Project title: "Large Scale Survey of Americans in Multiple Congressional Districts." Financial support: \$8,500.

Michael C. Herron

5

National Science Foundation, SES-041849, July, 2004. Project title: "A Ballot-Level Study of Intentional and Unintentional Abstention in Presidential Election Voting." Financial support: \$65,749.

Nelson A. Rockefeller Center for the Social Sciences, Dartmouth College, January, 2004. Project title: "Intentional Invalid Votes in Leon County, Florida." Financial support: \$1115.

American Enterprise Institute, August, 1999. Project title: "Tenure in Office and Congressional Voting" (with Kenneth W. Shotts). Financial support: \$182,500.

Northwestern University Research Grants Committee, February, 1999. Project Title: "Representation, Policy Uncertainty, and Divided Government." Financial support: \$4087.

Stanford University Graduate School of Business, 1997-1998 Academic Year. Dissertation Research Grant.

Recent Conference Presentations

"Legislative District Compactness and Court Precedent," 2013 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"High School History Textbook Coverage of the 2000 Presidential Election," 2010 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"The Uses and Limitation of Hard Case Analysis," 2008 Northeast Political Methodology Meeting, New York, NY.

"The Uses and Limitation of Hard Case Analysis," 2008 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"Voting Technology and the 2008 New Hampshire Primary," 2008 William & Mary School of Law Conference, *How We Vote*, Williamsburg, VA.

"Representation and American Political Institutions," 2007 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"From Punchcards to Touchscreens: Some Evidence from Pasco County, Florida on the Effects of Changing Voting Technology," 2006 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

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Invited Seminars

University of Iowa, 1999	University of Chicago, 2007
Boston University, 2000	Yale University, 2007
Dartmouth College, 2000	Stanford University, 2008
Harvard University, 2000	Columbia University, 2008
University of Minnesota, 2000	Northwestern University, 2008
University of Rochester, 2000	Princeton University, 2008
University of Wisconsin, Madison, 2000	Duke University, 2009
Yale University, 2000	Hertie School of Governance, 2010
Columbia University, 2001	Emory University, 2010
University of California, Berkeley, 2002	University of Mannheim, 2011
University of Illinois, 2002	University of Heidelberg, 2011
Brown University, 2003	University of Passau, 2012
Temple University, 2003	University of Göttingen, 2012
University of Chicago, 2003	Freie Universität Berlin, 2012
New York University, 2004	Laval University, 2012
Princeton University, 2004	University of Montreal, 2012
University of Michigan, 2005	Middlebury College, 2013
George Washington University, 2006	University of Illinois, Champaign, 2013
Emory University, 2006	University of Illinois, Chicago, 2013
Harvard University, 2007	University of Wisconsin, Madison, 2013
Loyola Law School, 2007	Yale University, 2014
Columbia University, 2007	

Teaching Interests

Statistical Methods: introductory and advanced econometrics, research design, Bayesian statistics

American Politics: Congress, contemporary legislative theory, comparative legislative institutions, institutional design, elections, election irregularities

Political Economy: game theory

Dartmouth College Activities

Committee on Priorities, July, 2013 – present.

Research Computing Director search committee, October, 2013 – present.

Senior Search Committee, Department of Government, 2013.

Research Computing Advisory Committee, Spring 2013.

Chair, American Politics Search Committee, Department of Government, 2012-2013.

Recruitment Planning Committee, Department of Government, 2010 and 2012-2013.

Committee on Standards, 2008-2010.

Task Force on Collaboration and Social Software, 2007-2008.

Biostatistics search committee, Dartmouth Medical School, 2006-2007.

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Research Computing Oversight Committee, 2006.

Council on Computing, 2005-2007.

Clement Chair search committee, Department of Government, 2005-2006.

Professional Activities

"Race, Voting Procedures, and New Developments in Voting Rights," panel organized for the 2013 Annual Meeting of the Midwest Political Science Association.

Editorial Board, *USENIX Journal of Election Technology and Systems*, March, 2013–present.

Editorial Board, *Political Analysis*, January, 2010–present.

Editorial Board, *American Political Science Review*, 2010–2012.

Editorial Board, *American Journal of Political Science*, 2006–2009.

Division Chair, Formal Theory Section, 2007 Annual Meeting of the American Political Science Association.

Co-editor, *The Political Methodologist*, Fall, 2004–Spring, 2006.

Publications Committee of the Society for Political Methodology, 2005–2006.

Reviewer for

<i>American Journal of Political Science</i>	The National Science Foundation
<i>American Political Science Review</i>	<i>Perspectives on Politics</i>
<i>American Politics Quarterly</i>	<i>Political Analysis</i>
<i>American Politics Review</i>	<i>Political Behavior</i>
<i>British Journal of Political Science</i>	<i>Political Research Quarterly</i>
Cambridge University Press	<i>Political Studies</i>
Chapman & Hall	<i>Politics & Gender</i>
<i>Du Bois Review</i>	<i>Policy Studies Journal</i>
<i>Economics & Politics</i>	Prentice Hall Higher Education Group
<i>Election Law Journal</i>	<i>Proceedings of the National Academy of Sciences</i>
<i>Electoral Studies</i>	<i>Public Administration</i>
<i>Emerging Markets Finance & Trade</i>	<i>Public Choice</i>
<i>Interest Groups & Advocacy</i>	<i>Public Opinion Quarterly</i>
John Wiley & Sons, Inc.	<i>PS: Political Science and Politics</i>
<i>Journal of Legal Studies</i>	<i>Quarterly Journal of Political Science</i>
<i>Journal of Money, Credit and Banking</i>	<i>The Social Science Journal</i>
<i>Journal of Politics</i>	<i>Sociological Methods & Research</i>
<i>Journal of Public Economics</i>	Springer
<i>Journal of Theoretical Politics</i>	<i>State Politics & Policy Quarterly</i>
<i>Journal of Women, Politics & Policy</i>	The University of Michigan Press
<i>Legislative Studies Quarterly</i>	<i>World Politics</i>

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Other Employment

Intelligence Analyst and Military Officer, United States Air Force, Foreign Technology Division,
Wright-Patterson Air Force Base, 1989–1992.

Last updated: June 19, 2014

<http://www.dartmouth.edu/~herron/cv.pdf>

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

MARC VEASEY, *et al.*,

Plaintiffs

v.

RICK PERRY, *et al.*,

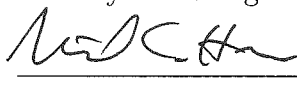
Plaintiffs

Civil Action No. 2:13-cv-193 (lead)
(consolidated w/ 2:13-cv-263)

Amended Declaration of Michael C. Herron

Attached is my amended expert report in this litigation. I declare under penalty of perjury under the laws of the United States that the report is true and correct to the best of my knowledge.

Signature and Date

 8/14/14

Rates of Valid Voter Identification Possession among Registered Voters in Texas

1 Introduction

2 In the matter of *Marc Veasey, et al., v. Rick Perry, et al.*, I was asked by
 3 plaintiffs' counsel Chad Dunn of *Brazil & Dunn* to analyze a dataset which
 4 contains information on the rates at which registered voters in the state of
 5 Texas have valid forms of voter identification per requirements set forth in
 6 Texas Senate Bill 14 (SB 14), a piece of legislation signed into law in Texas
 7 on May 27, 2011.¹ The dataset I was asked to analyze contains the results of
 8 applying two distinct matching algorithms—specifically, a plaintiff algorithm
 9 and a defendant algorithm—to a variety of lists of individuals. The existence
 10 of two matching algorithms, both of which compare lists of registered voters
 11 in Texas to lists of individuals who have been issued forms of identification
 12 permitted by the aforementioned SB 14, reflects the outcome of a negotiated
 13 process between plaintiffs and defendants in the contest noted above. I did
 14 not execute either of the two algorithms. Rather, Mr. Dunn requested that I
 15 analyze the output of them, and this report describes my analysis in response
 16 to Mr. Dunn's request.

17 ¹The legislative history of Senate Bill 14 is described in [http://www.capitol.](http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14)
 18 [state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14](http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB14) (last accessed June
 19 19, 2014).

1 I am William Clinton Story Remsen 1943 Professor of Government at
2 Dartmouth College and have taught in the Department of Government at
3 Dartmouth since 2003. I previously was on the faculty of Northwestern Uni-
4 versity, and I have visited at Harvard University, the University of Rochester,
5 and the Hertie School of Governance in Berlin. In January, 1998, I received
6 a doctorate in the field of Political Economy from the Graduate School of
7 Business at Stanford University. I also have a master's degree in statistics
8 from Stanford University (June, 1995), a master's degree in political science
9 from the University of Dayton (August, 1992), and a bachelor's degree in
10 mathematics and economics from Carnegie-Mellon University (May, 1989).

11 I have published in many political science journals including the field's
12 top general journals: *American Political Science Review*, *American Journal*
13 *of Political Science*, and *Journal of Politics*. I have published as well in
14 speciality journals like *Election Law Journal*, *American Politics Research*,
15 and *Legislative Studies Quarterly* and have consulted in a variety of legal
16 cases. My curriculum vitae, which lists all of my published papers, is attached
17 to this report as Appendix D. I have not been offered as a testifying expert
18 in the past four years.

19 The techniques used in this report are typical of, and in some cases iden-
20 tical to, techniques that I have used in the past and continue to use regularly
21 as part of my academic research agenda. In addition, the software and hard-
22 ware that I used in the course of preparing this report are standard, and
23 to the best of my knowledge other scholars who work on the types of data

1 described here regularly rely on software and hardware similar or identical to
2 the software and hardware, respectively, used in the work described in this
3 report.

4 This amended declaration is the second declaration I have filed pursuant
5 to *Marc Veasey, et al., v. Rick Perry, et al.* I was paid a flat fee of \$15,000
6 for my initial declaration, and I am being paid at a rate of \$400/hour for
7 work required to amend my declaration in light of a data discrepancy that I
8 discuss below. I will be compensated at a rate of \$250/hour, plus expenses,
9 for deposition and trial time.

10 This report relies on the following source material:

11 1. Ten documents sent to me by plaintiffs' counsel on May 30, 2014, and
12 received on May 31, 2014, plus a corrected document sent to me by
13 plaintiffs' counsel on June 25, 2014. These documents are as follows:

14 (a) Letter to plaintiffs, dated May 30, 2014, signed by Anna M. Bald-
15 win of the United States Department of Justice.

16 (b) Exhibit A, Final Plaintiffs' Algorithm. "United States' Database
17 Matching Protocol."

18 (c) Exhibit B, Database Matching Criteria v2 (Final Defendants'
19 Algorithm). "Criteria for Matching Records in the TEAM
20 Database."

21 (d) Exhibit C, State Department. "Declaration of Lee Charles Bay-
22 dush."

1 (e) Exhibit D, Defense. "DECLARATION OF Michelle Saunders
2 Rudolph."

3 (f) Exhibit E, VHA. "DECLARATION OF MICHAEL MIMS."

4 (g) Exhibit F, VBA. "DECLARATION OF KENNETH SMITH."

5 (h) Exhibit G, SSA. "DECLARATION OF STEVE STRAUSLER."

6 (i) Exhibit H, USCIS. "DECLARATION OF YEMI B. OSHIN-
7 NAIYE."

8 (j) Corrected Exhibit C, "CORRECTED DECLARATION OF LEE
9 CHARLES BAYDUSH."

10 2. Exhibit 1, declaration of John W. Crawford, "DECLARATION."

11 3. Data reporting plaintiff and defendant matching algorithm results, sent
12 to me on May 30, 2014, by the United States Department of Justice on
13 an encrypted USB storage device.

14 4. A compact disc with the title, "Match Results for Plaintiffs' Algorithm
15 (in May 30 format) of July 23 DPS data to TEAM - REDACTED,"
16 supplied to me on August 7, 2014, by the United States Department
17 of Justice.

18 5. A compact disc with the title, "U.S. Supplemental Data Matching Pro-
19 duction re: Late-Produced DPS data - Redacted," supplied to me on
20 August 7, 2014, by the United States Department of Justice.

1 6. An email written by Anna M. Baldwin on August 5, 2014, and for-
2 warded to me by counsel on August 8, 2014.

3 7. An encrypted file named “non_matches_among_previous_matches.zip,”
4 emailed to me by counsel on August 8, 2014.

5 8. Publicly-available census data on the definition of blocks and block
6 groups, downloaded from the website of the United States Census Bu-
7 reau.

8 9. Publicly-available census data from the American Community Survey
9 2008-2012, downloaded from the website of the United States Census
10 Bureau.

11 10. Geocoded addresses, supplied to me by an independent contractor as
12 discussed in the body of this report.

13 At the request of plaintiffs’ counsel I supplied on June 26, 2014, four USB
14 key drives that contained in an encrypted form copies of the files, documents,
15 and code that I used in support of my original report. For this amended
16 report, at the request of plaintiffs’ counsel I am supplying in an encrypted
17 form copies of the files, documents, and code that changed between the time
18 I wrote my original report and this amended report.

19 After a summary of main findings, in the next section of this report I
20 describe the data on which the report is based and the key data management
21 steps that I took upon receiving the data. Following the data section I

1 describe my analysis of the plaintiff matching algorithm as applied to lists
2 of registered Texas voters and to lists of individuals who have valid forms of
3 identification per SB 14. The last section of the report describes my analysis
4 of the defendant matching algorithm as applied to these lists.

5 **Summary of main findings**

6 The key findings in this report, based on the May 31, 2014, and August 7,
7 2014, datasets provided to me, are as follows.

- 8 1. Of 13,564,410 registered voters in Texas, conservatively speaking
9 619,354 (or approximately 4.57%) appear to lack valid forms of voter
10 identification per current Texas state law. If for the purposes of cal-
11 culating the fraction of registered Texans who lack voter identification
12 the 50,205 registrants who appear to be deceased are removed from the
13 analysis, then approximately 4.59% lack voter identification. These re-
14 sults are based on the output of a plaintiff algorithm that assesses rates
15 of valid voter identification possession by comparing an official list of
16 Texas registrants with lists of individuals who possess valid forms of
17 voter identification.
- 18 2. Restricting attention to 796 census block groups in Texas that are at
19 least 96% Hispanic, 96% white, or 96% black based on citizen vot-
20 ing age population as drawn from the United States Census Bureau's

1 2008-2012 American Community Survey, white registered Texans pos-
2 sess valid forms of voter identification at a rate greater than registered
3 Hispanics and registered blacks. This conclusion holds regardless of
4 whether registered voters who appear to be deceased are removed from
5 the analysis or not.

6 3. An ecological regression analysis of 11,949 census block groups in Texas
7 shows that white registered Texans possess valid forms of identification
8 at a rate greater than registered Hispanics and registered blacks. This
9 conclusion holds when restricting attention to the 7,473 census blocks
10 in Texas in which Hispanics, blacks, and white make up at least 97%
11 of the citizen age voting population.

12 4. A defendant algorithm for assessing rates of valid voter identification
13 possession among Texas registered voters generates conclusions that
14 are qualitatively identical to those based on the plaintiff algorithm that
15 produced the conclusions listed above.

16 The key findings in this report, based on the May 31, 2014, and August
17 7, 2014, datasets provided to me as well as a list of Texas registered voters
18 received by me on August 8, 2014, are as follows.

19 1. If the voters on the August 8, 2014, list of registered voters (described
20 later in this report) are treated as lacking valid forms of voter iden-
21 tification, then the number of Texas registered voters who lack voter

1 identification per SB 14 is approximately 800,000. A racial/ethnic anal-
2 ysis treating the registered voters on the August 8, 2014, list as lacking
3 valid forms of voter identification shows that white registered Texans
4 possess valid forms of voter identification at a rate greater than regis-
5 tered Hispanics and registered blacks.

6 **Data and data management**

7 On Saturday, May 31, 2014, I received an encrypted storage device from
8 officials in the United States Department of Justice in Washington, D.C.
9 Hereinafter I refer to this encrypted device simply as the device. I was
10 provided a password to the device by plaintiffs' counsel, and I used this
11 password to mount the device on a computer that I regularly use for data
12 analysis. I copied without complications the contents of the device to this
13 computer. To the best of my knowledge, the defendants in the contests noted
14 at top of this report received the same data files that I did although without
15 redactions; I note that the files I received were redacted in the sense of not
16 containing full social security numbers.

17 The device contains a folder titled "forPlaintiffs," and this folder con-
18 tains eight additional folders. Each such folder in "forPlaintiffs" is titled
19 "Source_Agency" where "Agency" is either an unit of the federal government
20 or is the state of Texas. For example, one such folder is titled "Source_DOJ"
21 and another folder, "Source_Texas." Hereinafter I refer to these folders as

1 source folders. From plaintiffs' counsel I received via email nine documents
2 (and later a corrected document) which among other things describe the con-
3 tents of the eight source folders on the device and the file naming conventions
4 used in these folders. I have relied on these documents to understand the
5 contents of the source folders.

6 Along with other files, the source folders on the device include ascii data
7 files which contain data on registered voters in Texas as of January 15, 2014.
8 This date is specified in a May 30, 2014, letter to all parties signed by Anna
9 M. Baldwin of the United States Department of Justice. Henceforth when I
10 refer to registered voters in Texas, or lists thereof, I am referring to registered
11 voters in this state as of January 15, 2014.

12 The ascii data files in the eight source folders on the device describe the
13 results of two matching algorithms applied to various lists of individuals.
14 Henceforth I call the algorithms the plaintiff algorithm and the defendant
15 algorithm. Each of these algorithms compares a list of registered voters
16 in Texas with lists of individuals who have forms of identification that are
17 specified in SB 14. The list of registered voter in Texas is drawn from what
18 is called the Texas Election Administration Management (TEAM) database,
19 and lists of individuals who have forms of identification are drawn from what
20 are called target databases.²

21 ²The Texas Secretary of State describes TEAM as follows: "The Elections Division
22 administers and maintains the Texas Election Administration Management (TEAM) Sys-
23 tem, which is an online, HAVA compliant, voter registration application designed for

1 The various target databases that the plaintiff and defendant algorithms
 2 utilize are listed in Table 1. This table also notes the forms of identification
 3 associated with each target database.

Table 1: Target Databases

Database	Form of identification
Texas Department of Public Safety	Drivers's license, Personal identification card Concealed handgun license Election identification certificate
Department of Defense	Military common access card Uniformed services identification card Civilian retiree card
Department of Veterans Affairs	Veterans affairs card
Department of Homeland Security	Certificate of citizenship Certificate of naturalization
Department of State	United States passport United States passport card

Note: above the dashed line are Texas state databases and forms of Texas identification. Below the line are federal databases and forms of federal identification.

4 As made clear in Table 1, there are two types of target databases: Texas
 5 target databases, which contain lists of individual who have Texas-issued
 6 county officials to maintain accurate and efficient voter registration rolls. Currently,
 7 over 200 counties utilize the TEAM application to maintain their daily voter registra-
 8 tion requirements. The remaining counties comply with current state and HAVA re-
 9 quirements by updating the state database on a daily basis through a file transfer.”
 10 See <http://www.sos.state.tx.us/elections/index.shtml/> (last accessed August 10,
 11 2014).

1 forms of identification, and federal target databases, which contain lists of
2 individuals who have federal forms of identification. Hereinafter I refer to the
3 Texas Department of Public Safety as the DPS. The Texas DPS database
4 consists of four elements, one corresponding to each of the types of iden-
5 tification noted in Table 1. In this report I sometimes refer to the DPS
6 driver's license database; this database is a list of all individuals who as of
7 a given data have valid Texas driver's licenses. When I refer to, say, the
8 Texas driver's license database, this should be understood as referring to the
9 driver's license element of the overall DPS database.

10 The goal of the plaintiff and defendant matching algorithms is to assess
11 whether registered voters in Texas (those whose names appear in the TEAM
12 database) also are listed in Table 1's target databases. The idea here is
13 as follows: if a hypothetical registered Texas voter in the TEAM database
14 can be associated with a record in, for example, the Texas driver's license
15 database, then, assuming that this association is valid, it can be said that
16 the registered voter was issued a valid Texas driver's license at some point.

17 With this example in mind, determining if Texas registered voters listed
18 in the TEAM database also appear in the target databases of Table 1 requires
19 comparing a list of Texas registered voters with lists of individuals who pos-
20 sesses SB 14-approved forms of voter identification. It should be noted that
21 the TEAM database and the databases listed in Table 1 are maintained by
22 agencies at different levels of government, that these databases do not always
23 contain identical fields, that the individuals in the TEAM database do not

1 always have unique names and other personal characteristics, and that indi-
2 viduals in the target databases also do not always have unique names and
3 personal characteristics.

4 When in this report I refer to an individual having or possessing a given
5 form of identification that is suitable for voter identification per SB 14, this
6 refers solely to the fact that said individual was found by a matching algo-
7 rithm on a list of individuals who were issued the form of identification in
8 question. With the data I have been provided, I cannot ascertain if a person
9 who was issued a form of identification has this form in his or her possession
10 and/or has ready access to it.

11 The United States Department of Justice (hereinafter, DOJ) and various
12 federal agencies were responsible for executing both the plaintiff and the
13 defendant algorithms. For details on the algorithms' steps, see Appendix A.
14 The output of these algorithms was a set of files that appear in the source
15 folders on the device. These files contain fields which indicate whether a given
16 Texas registered voter was determined, based on a set of specified criteria, to
17 have a particular form of identification. I discuss these criteria later, and for
18 the moment it suffices to note that the two algorithms differ in the criteria
19 they use to ascertain whether registered voters in Texas have particular forms
20 of identification, i.e., whether registered voter records in the TEAM can be
21 associated with records in the target databases.

22 Table 2 lists the source files on the device that contain results, among
23 other things, of applying the plaintiff and defendant algorithms to the target

Table 2: Data files containing results of plaintiff and defendant matching algorithms

Filename	Source	Lines	Registered voters
DOD_results_redacted	DOD	13,564,421	13,564,420
TEAM_Update_20140526.txt	DOD	13,564,420	13,564,420
DOJ_results_redacted	DOJ	13,564,411	13,564,410
Texas_results_redacted	DOJ	13,564,411	13,564,410
dos_results_redacted	DOS	13,564,415	13,564,414
USCIS_TX_EXTRACT.CSV	USCIS	13,564,418	13,564,418
vba_redacted	VA	13,555,661	13,555,660
vha_redacted	VA	299,321	299,320

Note: DOD refers to the Department of Defense, DOJ to the Department of Justice, DOS to the Department of State, USCIS to the United States Citizenship and Immigration Services, and VA to the Department of Veterans Affairs.

1 databases listed in Table 1. The table lists the number of lines in each source
2 file as well as the number of Texas registered voters in each file. In most
3 cases these two numbers differ by one because the results files listed in Table
4 2 contain header lines (a header line is a line at the top of a file which contains
5 field information as opposed to data). Notwithstanding header lines, each
6 line of each results file listed in Table 2 contains matching algorithm results
7 applied to a single Texas registered voter.

8 Table 2 includes two files that contain data from the DOD. This reflects
9 the fact that officials at the DOD spread their plaintiff and defendant algo-
10 rithm results across two files. This is noted in “DECLARATION OF Michelle
11 Saunders Rudolph,” and see in particular paragraphs 11-13.

1 With one exception the source files in Table 2 include a field called *vuid*.
 2 This field is a Texas voter identification number which I understand is as-
 3 signed by a Texas authority to each registered voter in Texas. Such numbers
 4 consist of ten-digit integers. The presence of the *vuid* field in multiple files
 5 (all the files listed in Table 2 except for one) allows me to link these files and
 6 in particular to determine the relationships between the rows in the various
 7 source files.

8 The data file supplied by the United States Citizenship and Immigration
 9 Services, hereinafter USCIS, does not contain a *vuid* field. Instead this file
 10 contains a field called *var_fill*. On account of this, I extracted values of *var_fill*
 11 and *vuid* from the DOS source file on the device, and I appended a *vuid* field
 12 to the USCIS data that I extracted from “USCIS_TX_EXTRACT.CSV” us-
 13 ing *var_fill* as a linking variable. There are 13,564,418 records in the USCIS
 14 data file as noted in Table 2, and the operation using *var_fill* and *vuid* suc-
 15 cessfully linked all but 16 of them.³

16 Ignoring for the moment the source file titled “vha_redacted,” it is evi-
 17 dent from the files in Table 2 that there is variance in the number of Texas
 18 registered voters contained in each file. This variance is minuscule compared
 19 to 13.5 million, which is approximately the number of registered voters in
 20 Texas according to the files in Table 2. I had to make a choice of which

21 ³The values of *var_fill* for which were not linked are as follows: 1043270vf, 1118270vf,
 22 1308329vf, 1842133vf, 2174100vf, 3173904vf, 3890396vf, 4101251vf, 4593465vf, 4750630vf,
 23 6655642vf, 8006982vf, 7981930vf, 10409123v, 11386580v, and 13218912v.

1 set of vuids to use to conduct my analysis, and I chose the DOJ's list of
 2 vuids. As noted in Table 2 there are 13,564,410 vuids in the file named
 3 "DOJ_results_redacted," and henceforth I refer to this file as the DOJ data
 4 file.⁴ I checked whether the vuids in the DOJ data file are unique, and they
 5 are. I also checked whether each void in this file has ten digits, and they
 6 all do. The number 13,564,410 is important insofar as it serves as a divisor
 7 when I describe, for example, the percentage of Texas registered voters who
 8 have valid forms of voter identification.⁵

9 The explanation for Table 2's low number of Texas registered voters in
 10 the Veterans Health Administration file "vha_redacted" can be found on p.
 11 9, paragraph nine, of the *Declaration of Michael Mims*. Namely, when at the
 12 direction of the DOJ the Veterans Health Administration (VHA) executed
 13 the plaintiff and defendant matching algorithms by comparing a list of Texas

14 ⁴The file titled "DOD_results_redacted" contains more lines and registered voters than
 15 "DOJ_results_redacted," but not all lines in the former are associated with unique vuids.
 16 To be precise, there are five vuids that are repeated in "DOD_results_redacted," and these
 17 vuids are as follows: 1020955947, 1029588272, 1043042970, 1060125468, and 1078429608.
 18 All of these vuids appear twice in "DOD_results_redacted" except for the first void, which
 19 appears three times.

20 ⁵There are four vuids that appear in a file named "team_voter_file_other_fields.txt"
 21 (this file appears in the "Source_DOJ" folder on the device) and do not appear in the
 22 DOJ data file. In addition, this same file contains five repeated vuids. The vuids that
 23 appear in "team_voter_file_other_fields.txt" but not in the DOJ data file are 1055703925,
 24 1173501177, 1190278288, and 1190971476. The five repeated vuids that appear in the
 25 former are 1020955947, 1029588272, 1043042970, 1060125468, and 1078429608.

1 registered voters with a list or lists of individuals who have Veteran Identifi-
 2 cation Cards, the output of such algorithms dropped registered voter records
 3 that did not match on any of the plaintiff or defendant criteria. That is,
 4 exactly 299,320 Texas registered voters matched VHA records using criteria
 5 specified in either the plaintiff algorithm, the defendant algorithm, or both.

6 Beyond a void and in some cases a var_fill field, the source files in Table 2
 7 include two other types of fields. One type of field contains registered voter
 8 details like first name, last name, street address, residential zip code, and so
 9 forth.⁶ The second type of field contains indicators that describe the results
 10 of applying the plaintiff and defendant algorithms to target databases. For
 11 example, consider the driver's license part of the Texas DPS database; this
 12 is one of the target bases used in the plaintiff algorithm, and the database is
 13 listed in Table 1. Results for applying the plaintiff algorithm to this target
 14 database are contained in the source file "DOJ_results_redacted," and this file
 15 includes many fields that describe the extent to which registered voters in
 16 Texas matched the list of holders of Texas driver's licenses.

17 One such field is called "agdn_match_dl." The prefix "agdn" here refers
 18 to a particular primary sweep, and in the file "doj_results_redacted" val-
 19 ues of the field "agdn_match_dl" are either zero, one, or two. If the value of
 20 "agdn_match_dl" for a particular registered Texas voter were zero, then it fol-
 21 lows that the sweep of the Texas DPS database, driver's license part, did not

22 ⁶Registered voter social security numbers are redacted from the source files that I used
 23 in this report.

1 find a match based on the identifier called “agdn.” If on the other hand the
2 value of “agdn_match_dl” were one, then the associated Texas registered voter
3 matched with a unique record in the DPS driver’s license database. And, if
4 the value of “agdn_match_dl” were two, then the associated Texas registered
5 voter matched to multiple records in the DPS driver’s license database based
6 on the “agdn” matching criteria.

7 I wrote a series of SQL scripts that took the source files in Table 2 and
8 from them constructed tables in a mysql database. My scripts read each field
9 in each of the source files. In the process of building my database I did not
10 encounter difficulties opening any of the data files listed in Table 2. There
11 are other files on the device beyond those listed in this table, and I did not
12 encounter any difficulties opening these latter files either.⁷

13 My database includes eight tables, one for each of the source files listed in
14 Table 2. Each table has columns that correspond to the fields in each source
15 file, and each table contains a void field. This latter field enables me to link

16 ⁷I had to process the DOD file named “TEAM_Update_20140526” on account of the
17 way this file was formatted. This file was not pipe-delimited like the other source files
18 listed in Table 2; rather, the fields in “TEAM_Update_20140526” were simply elided when
19 the file was generated. As a consequence of this, the file contains lines of varying length
20 depending on the presence in it of null fields that appear at ends of data lines: to be
21 precise, a “TEAM_Update_20140526” data line that ends with a null field or multiple null
22 fields is shorter than a line ending with numeric fields. I wrote a perl script that extracted
23 the fields from “TEAM_Update_20140526” and formatted the fields so that they were more
24 easily accessible.

1 the tables and assess, for example, whether a registered voter matched to
2 a record in the USCIS source data is also matched to a record in the DOS
3 source file.

4 **Additional July data**

5 On July 28, 2014, I received from plaintiffs' counsel an email containing a
6 declaration written by John W. Crawford. Among other things this declara-
7 tion notes that "approximately 2.8 million records" (p. 3) were not included
8 in the DPS data that was provided by the Texas DPS to the United States
9 Department of Justice. This exclusion of approximately 2.8 million records
10 means that my data file named "DOJ_results_redacted" and noted in Table
11 2 is incomplete.

12 On August 7, 2014, I received from the Department of Justice a
13 compact disc titled "Match Results for Plaintiffs' Algorithm (in May
14 30 format) of July 23 DPS data to TEAM - REDACTED." This disc
15 had on it an encrypted zip archive that contained a file named "ful-
16 lvf_to_julyrecs080114_REDACTED" in addition to an explanatory Microsoft
17 Word file named "codebook_for_080214_matches.docx." The latter file de-
18 scribes the format of "fullvf_to_julyrecs080114_REDACTED," and plaintiffs'
19 counsel explained verbally to me that this latter file complements the version
20 of "DOJ_results_redacted" that I had previously received.

21 I wrote an SQL script that uploaded the contents of "ful-

1 lvf_to_julyrecs080114_REDACTED” into my database, and I ver-
 2 ified that “fullvf_to_julyrecs080114_REDACTED” has 13,564,410
 3 records. I also verified that “fullvf_to_julyrecs080114_REDACTED”
 4 and “DOJ_results_redacted” contain the same set of Texas vuids.⁸

5 Henceforth when I refer to my dataset it should be understood that this
 6 dataset includes the data that I received on May 31, 2014, augmented by
 7 the data that I received on August 7, 2014. All of the calculations in what
 8 follows rely on combined May and August data.

9 **Analysis of plaintiff algorithm results**

10 The plaintiff algorithm consists of a set of sweeps across the target databases
 11 listed in Table 1. Each sweep specifies different criteria for assessing whether
 12 a given registered voter in Texas has a form of identification associated with
 13 a given target database. For example, one sweep in the plaintiff algorithm
 14 checks whether a Texas registered voter in the TEAM database matches a
 15 target record based on first name, last name, gender, date of birth, residen-
 16 tial zip code, and residential street number. This set of identifiers is called
 17 Combination A, and Combination A, like the other identifier combinations

18 ⁸Before I executed the SQL script I recoded some of the string fields in “ful-
 19 lvf_to_julyrecs080114_REDACTED” to integers so that field definitions in this file matched
 20 those in “DOJ_results_redacted.” In particular I replaced all instances in match and dead
 21 indicator variables of “no match” with zero; instances of “unique match” and “unique m”
 22 with one; instances of “multi id” with two; and, instances of “999” with three.

1 described in the plaintiff algorithm, uses standardized names, date of birth,
 2 and so forth. Standardization is described in Part I of the United States
 3 Database Matching Protocol. See Appendix A for details.

4 The plaintiff algorithm is broken down into what are called primary
 5 sweeps and secondary sweeps, and each sweep is based on identifiers like
 6 Combination A just noted. Combination B, for instance, is identical to
 7 Combination A except that it does not include a first name field. There
 8 are seven primary sweeps when the target database is drawn from the Texas
 9 DPS dataset and six when the target database is federal. Each sweep has
 10 associated with it its own combination like Combinations A and B.⁹ In prac-
 11 tice there are more secondary sweeps than there are identifier combinations.
 12 Appendix A includes details on the plaintiff algorithm as implemented, and
 13 pp. 13-14 in the appendix explain how secondary sweeps were carried out and
 14 enumerates how the numbers of such sweeps varied across federal databases.

15 Briefly, the criteria of the seven (or six when the target database is federal)
 16 primary sweeps in the plaintiff algorithm are as follows:

- 17 1. First name, last name, gender, date of birth, residential zip code, resi-
 18 dential street number (Combination A).

19 ⁹One of the primary sweeps is based on Texas driver's license numbers. To the best
 20 of my understanding, when registering to vote in Texas, individuals have the option of
 21 providing this number to election officials. Texas driver's license numbers do not appear
 22 in federal databases, and hence there is one fewer primary sweep in the plaintiff algorithm
 23 when the target database is federal than when it is DPS-based.

- 1 2. Last name, gender, date of birth, residential zip code, residential street
2 number (Combination B).
- 3 3. Gender, date of birth, residential zip code, residential street number
4 (Combination C).
- 5 4. First name, last name, date of birth, residential zip, and residential
6 street number (Combination D).
- 7 5. First name, last name, gender, residential zip, and residential street
8 number (Combination E).
- 9 6. First name, last name, gender, and date of birth (Combination F).
- 10 7. Texas driver's license number (Combination M). This sweep is not ap-
11 plicable to federal target databases.

12 Briefly, the criteria of the secondary sweeps in the plaintiff algorithm are
13 as follows:

- 14 1. First name, middle initial, last name, and date of birth (Combination
15 G).
- 16 2. Last four digits of social security number, date of birth, and residential
17 zip code (Combination H).
- 18 3. Last four digits of social security number, first name, last name, and
19 date of birth (Combination I).

1 4. First name, variation of last name, middle initial, and date of birth
2 (Combination K).

3 5. First name, different variation of last name, middle initial, and date of
4 birth (Combination L).

5 6. Full social security number.

6 The secondary sweeps in the plaintiff algorithm allow for some variations in
7 last name. The details can be found in “United States Database Matching
8 Protocol,” which is attached to this report as Appendix A.

9 **One-to-one versus one-to-many matches**

10 With respect to a given target database, the plaintiff algorithm keeps track
11 of the extent to which Texas registered voters listed in the TEAM database
12 are matched to a single target record or multiple target records. Suppose
13 a registered voter listed in TEAM is matched on a given sweep to a single
14 record in a single target database; this is an example of a one-to-one match.
15 A registered voter listed in TEAM who on a given sweep matched multiple
16 records in a single target database provides an example of a one-to-many
17 match. For the purpose of my counting the number of Texas registered voters
18 who possess valid forms of voter identification per SB 14, in any given sweep
19 and with respect to any target database, I treat all one-to-one matches and
20 one-to-many matches as matches. For example, when I count the number of
21 Texas registered voters who according to the plaintiff algorithm have valid

1 Texas driver's licenses, for any given sweep I add the number of registered
2 voters who have one-to-one matches with the DPS driver's license database
3 plus the number of registered voters who have one-to-many matches with
4 this database.

5 **Texas-only versus nationwide matches**

6 The plaintiff algorithm allows for records in federal target databases to be di-
7 vided into those with Texas addresses and those with addresses beyond Texas.
8 Then, when a Texas registered voter in the TEAM database is compared in
9 a particular sweep against all records in a given federal target database, the
10 sweep can either be Texas-only (meaning, that only target records with Texas
11 addresses are consulted when comparing a TEAM record to a set of target
12 records) or it can be nationwide (meaning that all records are included). For
13 the purpose of counting the number of Texas registered voters who possess
14 valid forms of voter identification per SB 14, all of my results below use na-
15 tionwide sweeps. This means that a TEAM record can match a federal target
16 record regardless of whether the address of the federal record is located in
17 Texas or not. By allowing federal database matches to include both records
18 with Texas address and records with addresses beyond Texas, I increase the
19 number of registered voters in TEAM reported to have been matched with
20 federal records in the target databases listed in Table 1.

1 **Registered voters matching to records flagged as de-**
2 **ceased**

3 In the four DPS target databases in Table 1, some records are associated
4 with deceased individuals. The plaintiff algorithm seeks to deal with this
5 issue in the following way.

6 With respect to a given DPS database, e.g., the driver's license database
7 which is one of four DPS elements in Table 1, a TEAM record of a Texas
8 registered voter can on a given primary or secondary sweep match a target
9 record that has been flagged by the Texas DPS as being associated with a
10 deceased individual. If this match is one-to-one, then it is said that the regis-
11 tered voter associated with the hypothetical TEAM record is *unambiguously*
12 deceased based on this single DPS database. If the match is one-to-many,
13 and if not all of the target records so hit were flagged by the DPS as being
14 associated with deceased individuals, then the registered voter is said to be
15 *ambiguously* deceased. Note that in principle a TEAM record can be am-
16 biguously deceased based on one of the four DPS datasets yet unambiguously
17 deceased based on another one.

18 Using primary only or both primary and secondary sweeps and based on
19 the four DPS databases in Table 1, I partition the set of registered Texas
20 voters into the following three classes: those who were either not matched to
21 a DPS record at all or who were matched to records that do not have any
22 deceased flags associated with them; those who, when matched to one or more

1 DPS records, were associated with deceased flags that were unambiguous in
 2 the sense above and moreover who were never matched in an ambiguous way
 3 regarding deceased status in the sense above; and, those who, when matched
 4 to at least two DPS records in a given DPS database, have an ambiguous
 5 deceased status in the sense above. These three sets of Texas registered
 6 voters can be said to be unambiguously alive, unambiguously deceased, or
 7 ambiguously deceased.

Table 3: Counts of deceased Texas registered voters, based on plaintiff algorithm

Category	Count	Percent
Primary sweeps, unambiguous	48,827	0.359
Primary sweeps, ambiguous	3,280	0.024
Primary and secondary sweeps, unambiguous	50,205	0.370
Primary and secondary sweeps, ambiguous	22,245	0.163

Note: reports results of plaintiff algorithm; percents are based on a registered voter pool of size 13,564,410 and are reported to the nearest thousandth.

8 Table 3 contains the counts of four types of deceased Texas registered
 9 voters. Of particulate note is 50,205, the number of unambiguously deceased
 10 registered voters based on primary and secondary sweeps. This number is
 11 approximately 0.370% of the Texas registered voter pool.

12 Note that a Texas registered voter listed in TEAM can only be unam-
 13 biguously deceased or ambiguously deceased if said registered voter matches
 14 a record in one or more of the DPS datasets listed in Table 1. Therefore,
 15 when either unambiguously deceased or ambiguously deceased records are

1 ignored for the purposes of counting the number of matches between Texas
 2 registered voters in the TEAM database and records in the state and federal
 3 target databases, the percent of records matched will drop in comparison to
 4 the percent that would have been calculated had the unambiguously deceased
 5 or ambiguously deceased not been dropped.

6 Results

7 Table 4 contains four counts of the numbers of Texas registered voters who
 8 have, or in contrast lack, a valid form of voter identification per my analysis of
 9 the plaintiff algorithm. There are four different counts in part because some
 10 counts include all Texas registered voters and others drop those registered
 11 voters found to be unambiguously deceased.

Table 4: Summary of plaintiff algorithm results

Type	Matches	Non-matches	Match Percent
Primary sweeps	12,754,009	810,401	94.02
without deceased	12,705,182	810,401	94.00
Primary and secondary sweeps	12,945,056	619,354	95.43
without deceased	12,894,851	619,354	95.41

Note: reports counts of matches based on either primary and primary plus secondary sweeps. The dropped deceased matches are those that are unambiguously deceased. Percentages are reported to the nearest hundredth.

12 Note in Table 4 that, for primary sweeps and for primary and secondary
 13 sweeps, the number of non-matches does not change when unambiguously
 14 deceased registered voters are dropped. This is because only Texas registered

1 voters who were matched to a record or to records in one of the DPS databases
2 can be deemed to be unambiguously deceased in the sense as explained above.

3 According to Table 4's results using primary and secondary sweeps, ap-
4 proximately 619,354 registered Texans lack valid forms of voter identification
5 as specified in SB 14. This constitutes almost 5% of the Texas registered
6 voter pool. A more restrictive interpretation of Table 4, one that depends
7 on primary sweeps only, would imply that the number of registered Texans
8 who lack valid voter identification is greater, over 800,000 individuals.

9 **Race/ethnicity and voter identification**

10 I was asked by plaintiffs' counsel to explore the relationship between regis-
11 tered voter race/ethnicity in Texas and voter identification possession rates.
12 For the purposes of this section of my report, I consider a Texas registered
13 voter to possess valid voter identification per SB 14 if said voter was matched
14 by either a primary sweep or a secondary sweep of the plaintiff algorithm to
15 any target database listed in Table 1.

16 I note that the data I received on the device do not break down
17 Texas registered voters by racial/ethnic group. There is a field in the file
18 "team_voter_file_other_fields.txt" named "spanish_surname," but this identi-
19 fier cannot assist me with an exercise that needs to classify Texas registered
20 voters as either Hispanic, white, or black.

21 In light of the lack of racial/ethnic information in the data used by the
22 plaintiff algorithm, I sought to classify Texas registered voters using census

1 data.

2 To start, for each Texas registered voter, I extracted his or
3 her residential address from the files “DOJ_results_redacted” and
4 “team_voter_file_other_fields.txt.” Both of these files are located in the
5 “Source_DOJ” source folder on the device.¹⁰ I then sent via email an en-
6 crypted list of Texas vuids and associated addresses to a graduate student
7 whom I hired to determine the census blocks (hereinafter, blocks) of all the
8 Texas registered voters whose residential addresses could be geocoded. Of
9 13,564,410 Texas registered voters, he returned to me encrypted files which
10 contained the blocks of 12,191,461 of these voters; this leads to a coverage
11 rate of approximately 89.88%. A description of how the Texas registered
12 voter geocoding operation was performed can be found in Appendix C.¹¹

13 Census blocks are nested within census block groups (hereinafter, block
14 groups), and the analysis that follows is conducted at the block group level.
15 I downloaded the United States Census Bureau database titled “Voting Age
16 Population by Citizenship and Race (CVAP);” this database is one element
17 of the 2008-2012 5-Year American Community Survey (ACS).¹² I extracted

18 ¹⁰I used both of these files, as opposed to just one of them, because neither file contained
19 complete registered voter residential addresses.

20 ¹¹I paid the graduate student \$50.00/hour for his geocoding work, which required 20
21 hours.

22 ¹²This database can be found at the following website: [https://www.census.gov/rdo/
23 data/voting_age_population_by_citizenship_and_race_cvap.html](https://www.census.gov/rdo/data/voting_age_population_by_citizenship_and_race_cvap.html) (last accessed
24 June 25, 2014).

1 the Texas portion of ACS CVAP dataset, and I wrote mysql scripts to upload
 2 the Texas ACS data into my database.

3 I then aggregated by block group all Texas registered voters for whom I
 4 had geocoded addresses, and I merged the ACS data with the block group-
 5 aggregated voter registration data. This produces for each block group the
 6 number of registered voters and the number of registered voters who possess a
 7 valid form of voter identification per SB 14. There are 15,811 block groups in
 8 Texas according to the ACS, and of these 15,767 contain at least one citizen
 9 of voting age. My block group aggregation of Texas registered voters does not
 10 consider individuals whose addresses could not be geocoded. Of the 15,767
 11 Texas block groups with citizens of voting age, the geocoding operation that
 12 I have described here placed registered voters into 15,760 of them.

13 The 2008-2012 ACS data breaks down by block group the number of
 14 voting age citizens by race/ethnicity. The 2008-2012 ACS contains data at
 15 higher levels of aggregation than the block group but not at lower levels,
 16 hence the use of block groups in this report as opposed to blocks. In what
 17 follows I focus on three racial/ethnic groups: Hispanic, non-Hispanic white,
 18 and non-Hispanic black.¹³

19 ¹³The category of non-Hispanic white refers here to monoracial non-Hispanics who clas-
 20 sify themselves as white; the Census Bureau calls this category, “White Alone.” Similarly,
 21 the category of non-Hispanic black refers to non-Hispanics who classify themselves as
 22 black; the Census Bureau calls this category, “Black or African American Alone.”

1 **Racially/ethnically homogeneous and nearly homogeneous block**
2 **group analysis**

3 Some block groups in Texas are homogeneous Hispanic with respect to CVAP,
4 meaning that all citizens of voting age in said block groups are Hispanic.
5 Similarly, some block groups in Texas are homogeneous white and others,
6 homogeneous black. Homogeneous Hispanic (or white or black) block groups
7 are useful analytically for the following reason. If 80% of registered voters
8 in a collection of completely homogeneous Hispanic block groups have valid
9 forms of voter identification per SB 14, then the Hispanic rate of valid voter
10 identification possession in these blocks groups is 80%. Similarly, if 85% of
11 registered voters who live in a collection of homogeneous white block groups
12 have valid forms of voter identification per SB 14, then the white rate of valid
13 voter identification possession in these blocks groups is 85%.

14 The numbers above are purely illustrative, but this example shows why
15 homogeneous block groups are useful: they allow one to characterize a
16 racial/ethnic voter identification possession rate even in the absence of data
17 which specifies the races/ethnicities of registered voters. With this in mind,
18 I determined that there were 137 block groups in Texas that were homoge-
19 neous Hispanic (they contain 64,305 registered voters), 62 conformable block
20 groups that were homogeneous white (containing 31,777 registered voters),
21 and 14 conformable block groups that were homogeneous black (containing
22 7,503 registered voters). A block group is said to be conformable if, one, the
23 number of aggregated registered Texas voters based on geocoded addresses

1 is less than or equal to the number of citizen age residents in the block group
 2 according to the American Community Survey and, two, according to Amer-
 3 ican Community Survey data the number of Hispanic citizens of voting age
 4 plus the number of white citizens of voting age plus the number of black
 5 citizens of voting age is no greater than the number of total citizens of voting
 6 age.¹⁴ The valid voter identification possession percentages in the homoge-
 7 neous white, homogeneous Hispanic, and homogeneous black block groups
 8 are approximately 96%, 91%, and 87% respectively.

9 It is conceivable that the valid voter identification possession rates in
 10 racially/ethnically homogeneous block groups in Texas may be different than
 11 the corresponding rates in non-homogeneous block groups. To address this
 12 concern, I consider nearly racially/ethnically homogeneous block groups in
 13 addition to the completely homogeneous ones noted above.

14 The logic behind my consideration of nearly racially/ethnically homoge-
 15 neous block groups is as follows. Consider a hypothetical block group that
 16 has 100 registered voters of whom 99 are white and one, non-white. If exactly
 17 80 of the voters in the block group have valid forms of voter identification,
 18 then the white rate of voter identification possession in the block group can
 19 be no greater than 80/99; if it were greater, then there would be more than 80
 20 registered voters in the block group with valid voter identification. Similarly,

21 ¹⁴In the ACS data, there are 836 Texas blocks groups in which the sum of white citizens
 22 of voting age plus the sum of black citizens of voting age plus the sum of Hispanic citizens
 23 of voting age is reported as greater than the total number of citizens of voting age.

1 the white rate of valid voter identification can be no smaller than 79/99; if it
 2 were smaller, then, because there is only one non-white in the block group,
 3 it would not be possible to have 80 registered voters in the block group with
 4 valid voter identification. Thus, it must be true in the hypothetical block
 5 group that the white rate of voter identification possession lies in the interval
 6 $[79/99, 80/99]$. This interval is said to *logically bound* the white voter iden-
 7 tification possession rate, and the interval is based on what is known as the
 8 method of bounds.¹⁵ This method produces logical bounds on rates (here,
 9 valid voter identification possession rates) when applied to collections of units
 10 (here, block groups that are nearly racially/ethnically homogeneous). These
 11 calculations are expressed as rates between zero and one, but it is simple to
 12 convert such rates to percentages that lie between zero and one hundred.

13 Note that the endpoints of the above interval—79/99 and 80/99—are
 14 *not* symmetric about 80/100 even though 80/100 is contained in the interval
 15 $[79/99, 80/99]$. Thus, logical bounds are not like confidence intervals that are
 16 often centered on a point estimate.

17 To this end, consider Figure 1. For eleven different homogeneity cutoffs
 18 (100% down to 90%), this figure plots logical bounds on valid voter iden-
 19 tification possession rates based on collections of block groups that satisfy
 20 certain homogeneity criteria. The dots in the figure are the valid voter identi-
 21 fication rates in these collections of block groups. The figure's logical bounds

22 ¹⁵See Otis Dudley Duncan and Beverly Davis, "An Alternative to Ecological Correla-
 23 tion," *American Sociological Review* 18:6. 1953.

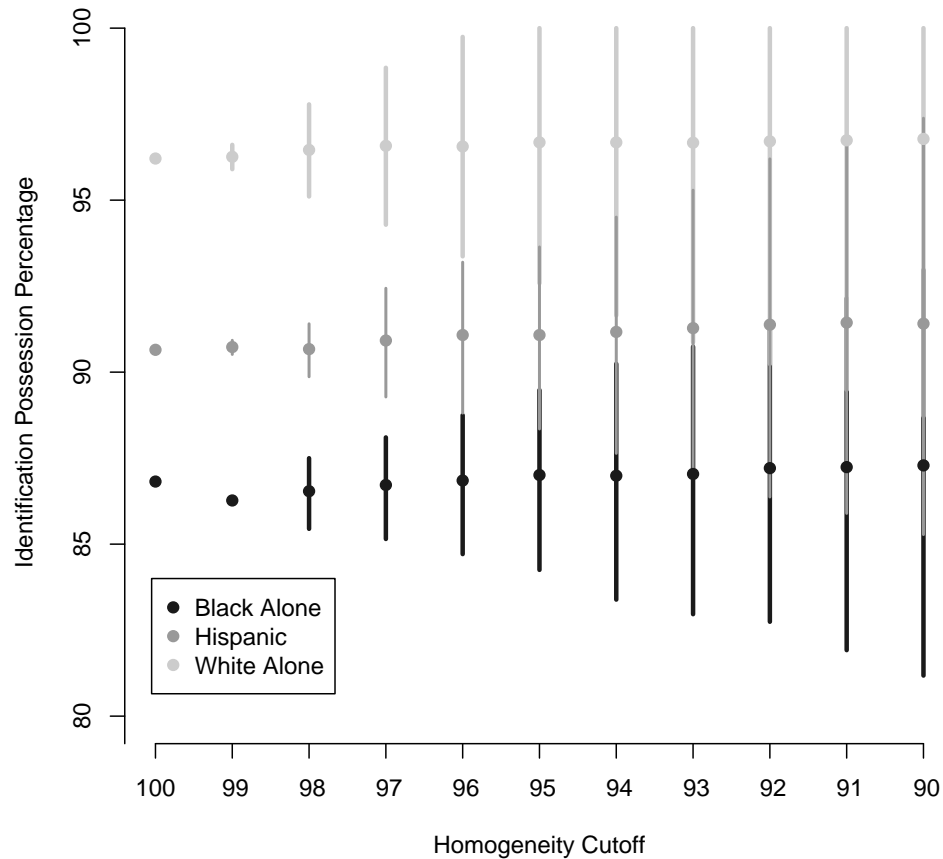
1 on Hispanic voter identification possession rates are based on collections of
 2 block groups that are at least as homogeneously Hispanic as a given cutoff;
 3 its logical bounds on white voter identification possession rates are based
 4 on collections of block groups that are at least as homogeneously white as
 5 a given cutoff; and, the figure's logical bounds on black voter identification
 6 possession rates are based on collections of block groups that are at least as
 7 homogeneously black as a given cutoff.¹⁶

8 Consider first the fully racially/ethnically homogeneous block groups, i.e.,
 9 the homogeneity cutoff is 100%. I already presented the valid voter identifi-
 10 cation rates for these block groups, and the rates are shown visually in Figure
 11 1. With attention restricted to completely racially/ethnically homogeneous
 12 block groups, the white voter identification possession rate is greater than the
 13 corresponding Hispanic rate which is greater than the corresponding black
 14 rate.

15 When the homogeneity cutoff is relaxed, i.e., when it is less than 100%,
 16 racial/ethnic voter identification possession rates cannot be known for cer-
 17 tain but can be logically bounded as illustrated above. With the earlier
 18 motivating example in mind, consider three sets of conformable Texas block
 19 groups, those that are at least 99% Hispanic (there are 161 and they contain
 20 78,005 registered voters), those that are 99% or more white (92, with 49,677
 21 registered voters), and those that are 99% or more black (15, with 8,466

22 ¹⁶The bounds in Figure 1 incorporate the fact that racial/ethnic voter registration rates
 23 in census block groups are not known and can only be bounded.

Figure 1: Texas registered voter identification possession rates in homogeneous and nearly homogeneous block groups, based on plaintiff algorithm



Note: describes overall voter identification rates in racially/ethnically homogeneous or nearly homogeneous block groups and logical bounds on corresponding racial/ethnic voter identification possession rates.

- 1 registered voters). These three collections of block groups yield three sets
- 2 of logical bounds on racial/ethnic valid voter identification possession rates.

1 The voter identification possession rates in the three collections of nearly (at
 2 least 99%) racially/ethnically homogeneous block groups are shown above
 3 the 99% mark on the horizontal axis in Figure 1, and logical bounds are
 4 plotted as well.

5 Figure 1 shows that, when the block group homogeneity cutoff is relaxed
 6 to 98%, associated logical bounds on Hispanic, white, and black valid voter
 7 identification possession rates become wider. At 98%, however, white bounds
 8 do not overlap corresponding Hispanic bounds; thus, the white valid voter
 9 identification possession rate in block groups at least 98% white is greater
 10 than the Hispanic valid voter identification possession rate in block groups at
 11 least 98% Hispanic. A similar point follows for the black voter identification
 12 rate in block groups at least 98% black.

13 Figure 1 shows that, with a homogeneity cutoff of greater than 96%, the
 14 rate at which white Texas registered voters possess valid voter identifica-
 15 tion is greater than the corresponding Hispanic and black rates.¹⁷ When
 16 the homogeneity cutoff is below 96%, it does not follow that Hispanic and
 17 white valid voter identification rates are equivalent. Rather, the overlapping
 18 bounds in Figure 1 that occur when the homogeneity cutoff is less than 96%
 19 simply means that the method of bounds cannot be used to distinguish His-

20 ¹⁷Although difficult to discern in Figure 1 due to the width of the lines in the figure,
 21 at a homogeneity cutoff of 96% the minimum possible Hispanic valid voter identifica-
 22 tion possession rate is greater than the maximum possible black valid voter identification
 23 possession rate.

1 panic, white, and black valid voter identification rates in block groups that
2 are not sufficiently homogeneous.

3 I created a version of Figure 1 which disregards registered voters who
4 are unambiguously deceased as this concept has been earlier defined. Such a
5 second version of the figure is qualitatively identical to the original.

6 **Racial/ethnic regression analysis**

7 My analysis of homogeneous and nearly homogeneous block groups in Texas
8 indicates that white valid voter identification rates exceed corresponding
9 rates for registered Hispanic and black voters in the state. I now extend my
10 racial/ethnic analysis by turning to a block group-level linear regression anal-
11 ysis of voter valid identification possession rates as characterized by the plain-
12 tiff algorithm. This regression analysis complements the homogeneous and
13 nearly homogeneous block group analysis above. The regression uses 11,949
14 conformable block groups in total, some of which are racially/ethnically ho-
15 mogeneous, some nearly homogeneous, and some very heterogeneous. That
16 the regression analysis uses 11,949 block groups is valuable insofar as its con-
17 clusions do not rest on a smaller subset of Texas block groups. Nonetheless,
18 the key assumption implicit in the regression analysis—namely, that His-
19 panic, white, and black rates of valid voter identification possession rates do
20 not vary by block group composition—was not invoked in Figure 1. Thus,
21 the earlier homogeneous and nearly homogeneous block group analysis and
22 the upcoming regression analysis have different strengths, and a key question

1 is whether their results are qualitatively different or qualitatively similar.

2 Using 11,949 block groups I estimate a weighted linear regression of voter
3 identification possession rates based on the plaintiff algorithm on a constant
4 and two block group-level variables, the fraction of a block group that is
5 Hispanic and the fraction of a block group that is black. Observations in the
6 regression were weighted by number of registered voters, and results are in
7 Table 5.

Table 5:

<i>Dependent variable:</i>	
Voter Identification Possession Percentage	
Hispanic Percentage	-0.056 (0.001)
Black Percentage	-0.077 (0.001)
Constant	97.923 (0.038)
Observations	11,949
R ²	0.354

Note: standard errors in parentheses

8 According to Table 5, the estimated white rate of valid voter identifi-
9 cation possession is approximately 97.9% with a 95% confidence interval of
10 (97.8, 98.0). The corresponding estimated Hispanic rate is approximately
11 92.3% with a 95% confidence interval of (92.2, 92.5). And, the corresponding

1 estimated black rate is approximately 90.3% with a 95% confidence interval
2 of (90.0, 90.5).

3 I estimated a second version of the regression in Table 5 which drops
4 registered voters who are unambiguously deceased as this concept has been
5 earlier defined. The results of such a regression are qualitatively identical to
6 those in Table 5.

7 I estimated a third version of the regression described in Table 5, this
8 time restricting attention to conformable block groups in which percentage
9 Hispanic plus percentage white plus percentage black is at least 97%. This
10 regression has 7,473 block groups, and its conclusions are qualitatively very
11 similar to those based on Table 5. In particular, the second regression's
12 estimated white rate of valid voter identification possession is approximately
13 97.5% with corresponding Hispanic and black estimated rates of 92.0% and
14 88.8%, respectively.

15 **Disability provision**

16 SB 14 contains a disability provision. Namely, a Texas registered voter who
17 the Social Security Administration (SSA) classifies as “in current payment
18 status for disability” or who the Veterans Administration (VA) classifies as
19 having “a disability rating of 50% or higher” receives special dispensation
20 under SB 14.

21 The device contains two disability databases, one from the SSA (the file
22 is “SSA_results_redacted” in a source folder called “Source_SSA”) and one

1 from the VA (“vba_redacted” in a source folder named “Source_VBA”). The
2 plaintiff algorithm calls for these two disability databases to be studied in the
3 same way that the target databases in Table 1 have been studied. Namely,
4 the plaintiff algorithm assesses whether registered voters appear in disability
5 lists using the primary and secondary sweeps that were discussed previously.

6 As previously reported in Table 4, across primary and secondary sweeps
7 the match percentage among Texas registered voters is approximately 95.43%
8 if all voters in the TEAM database are considered, and the match is approx-
9 imately 95.41% if unambiguously deceased registered voters are dropped. If
10 matches for disabilities are treated as matches for valid voter identification,
11 i.e., if one were to assume that all registered Texas who could apply for a dis-
12 ability exemption would so apply and would be granted such an exemption,
13 then these percentages change to 95.97% (includes all registered Texas) and
14 95.96% (drops unambiguously deceased individuals).

15 **Non-matched registered voters in Dallas County, Texas**

16 I was asked by plaintiffs’ counsel to calculate the number of Texas registered
17 voters in Dallas County who do not have SB 14-qualifying forms of voter
18 identification. In response to this request, I used the plaintiff algorithm to
19 count the number of registered voters per Texas county who have valid forms
20 of voter identification and the number who lack identification. There are 254
21 counties in Texas, and as criteria for having a valid form of voter identification

1 I used both primary and secondary sweeps.¹⁸

2 According to the TEAM database, there are 1,168,485 registered voters
 3 in Dallas County. Ignoring the issue of deceased individuals, I find that there
 4 were 67,089 registered voters in Dallas County who lack voter identification;
 5 this is approximately 5.74% of the Dallas County registered voter pool. If
 6 individuals who are unambiguously deceased are dropped, then there are
 7 1,161,759 registered voters in Dallas County, of whom approximately 5.77%
 8 lack voter identification.

9 **Analysis of defendant algorithm results**

10 Plaintiffs' counsel asked me to analyze the defendant matching algorithm in
 11 order to determine if the criteria used in this algorithm yields different results
 12 on valid voter identification possession rates than the plaintiff algorithm. In
 13 this section I provide an analysis which addresses this request.

14 The defendant algorithm is based on a series of five sweeps across the
 15 Texas target databases and federal target databases that are listed in Table 1.
 16 Each sweep specifies different criteria for assessing whether a given registered
 17 voter in Texas has a form of identification associated with a target database.

18 Briefly, the criteria of the five Texas sweeps are as follows:

19 ¹⁸To determine the counties of the registered voters in my dataset I relied on the field
 20 named *jur_id* in the file "team_voter_file_other_fields." Dallas County is county 57 per
 21 http://www.window.state.tx.us/taxinfo/tx_county_codes.html (last accessed June
 22 27, 2014).

- 1 1. Last four digits of social security number, last name, and date of birth.
- 2 2. Full social security number.
- 3 3. First name, last name, and date of birth.
- 4 4. First name, middle initial, last name, and date of birth.
- 5 5. Texas drivers license number.

6 For example, an individual from the list of Texas registered voters is said to
 7 match via Texas Sweep 1 on the driver's license portion of the Texas DPS
 8 database if said individual's last four digits of his or her social security num-
 9 ber, his or her last name, and his or her date of birth as listed in the TEAM
 10 database match at least one record in the Texas driver's license database
 11 based on these three fields. Texas Sweep 5 can only be applied to the Texas
 12 DPS databases listed in Table 1 because Texas driver's license numbers do
 13 not appear in the federal databases considered here. Additional details on
 14 the five Texas sweeps are described in "Criteria for Matching Records in the
 15 TEAM Database," and see Appendix B for details.

16 The five Texas sweeps allow for one-to-one, one-to-many, many-to-one,
 17 and many-to-many matches.¹⁹ One consequence of allowing many-to-one

18 ¹⁹The document titled "Criteria for Matching Records in the TEAM Database" contains
 19 the following passage: "Notes: For each ID/Database combination outlined above all
 20 specified matching queries should be run. Based on the matching algorithms, if a record
 21 (registrant) in the TEAM database matches a record in the database being searched, then
 22 this will be denoted as a match."

1 matches is that multiple registered voters in the TEAM databases can match
 2 to a single record in a target database; this is called a many-to-one match. If
 3 many-to-one matches occur, then the Texas sweeps can in principle report an
 4 excessive number of matches between registered voters and target records.

5 Table 6 contains by sweep and by combinations of sweeps the number of
 6 Texas registered voters whose vuids appear in the DOJ data file and were
 7 matched by the defendant algorithm.

Table 6: Summary of defendant algorithm results

Sweep	Matches
Texas 1	7,769,156
Texas 2	6,482,479
Texas 3	12,262,024
Texas 4	10,042,800
Texas 5	9,644,180
All but Texas 1	12,864,809
All but Texas 2	12,770,398
All but Texas 3	12,648,113
All but Texas 4	12,878,529
All but Texas 5	12,654,626
All	12,883,445

8 Based on the defendant algorithm, the least stringent criteria for valid
 9 voter identification possession posits that a registered Texas voter who
 10 matches on any of the five Texas sweeps has such a form of identification.
 11 This criterion finds that 12,883,445 Texas registered voters had such forms
 12 of identification. According to the DOJ data file and Table 2, there were
 13 13,564,410 registered voters in Texas. Thus, according to the defendant's

1 algorithm, the difference between this number and the number of Texas reg-
2 istered voters who have valid forms of voter identification is 680,965. Ac-
3 cording to the most conservative estimate of voter identification possession
4 based on the defendant algorithm, it follows that over 675,000 registered vot-
5 ers in Texas lack valid forms of voter identification. Similarly, according to
6 the least stringent interpretation of the defendant algorithm, approximately
7 5.21% of Texas registered voters lack valid forms of voter identification.

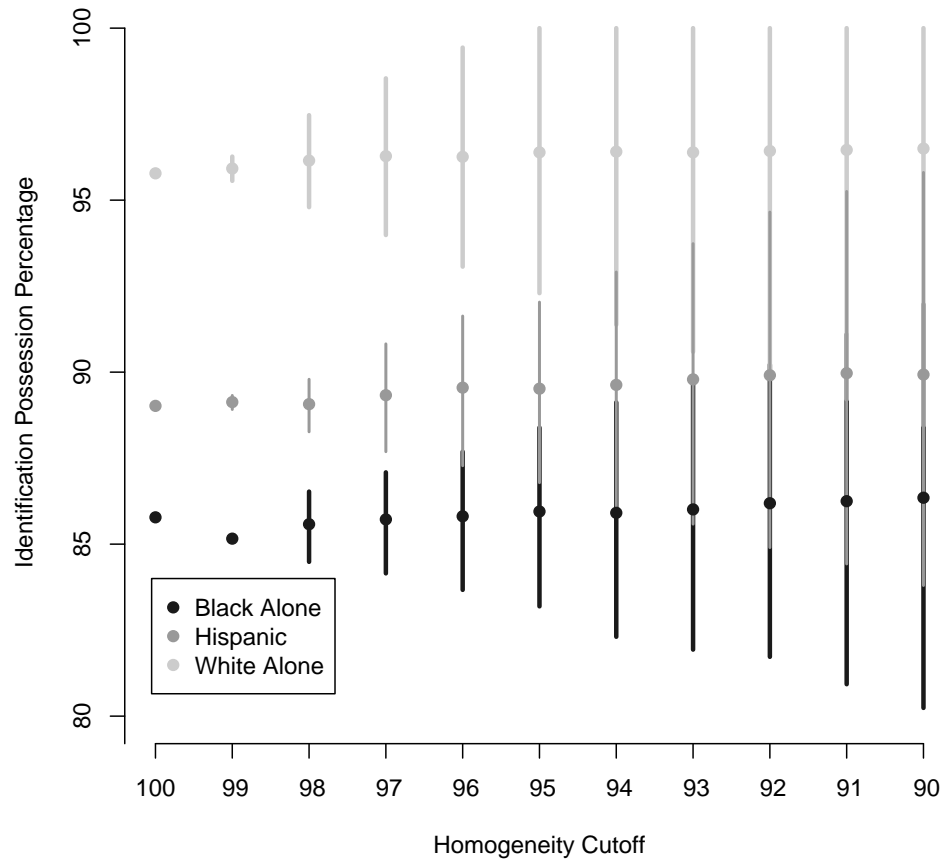
8 **Racially/ethnically homogeneous and nearly homogeneous block**
9 **group analysis**

10 In my analysis of the plaintiff algorithm I considered the extent to which
11 voter identification possession rates vary by racial/ethnic groups in Texas.
12 Based on the assumption that a registered voter who matches on any of the
13 five Texas sweeps possesses a valid form of voter identification, I follow a
14 procedure for a racial/ethnic analysis of the defendant algorithm identical to
15 that carried out earlier when I analyzed the results of the plaintiff algorithm.

16 As in the analysis of the plaintiff algorithm, my racial/ethnic analysis of
17 the defendant algorithm is broken into two parts. The first part is based
18 on a plot of racially/ethnically homogeneous and nearly homogeneous block
19 groups in Texas. The second is based on a regression model which covers
20 11,949 block groups in Texas.

21 Based on the defendant algorithm, Figure 2 describes the percentages
22 in racially/ethnically homogeneous and nearly homogeneous block groups of

Figure 2: Texas registered voter identification possession rates in homogeneous and nearly homogeneous block groups, based on defendant algorithm



Note: describes overall voter identification rates in racially/ethnically homogeneous or nearly homogeneous block groups and logical bounds on corresponding racial/ethnic voter identification possession rates.

- 1 Texas registered voters who possess valid forms of voter identification. This
- 2 figure parallels the previous Figure 1 in my analysis of the plaintiff algorithm.

1 Consider first Figure 2's depiction of completely racially/ethnically ho-
2 mogeneous and conformable block groups in Texas. These block groups
3 are analyzed in the portion of the figure where the homogeneity cutoff on
4 the figure's horizontal axis is 100%. Figure 2 shows that the percentage
5 of white registered voters in Texas who possess valid forms of voter iden-
6 tification is approximately 95.8%. Corresponding Hispanic and black per-
7 centages are approximately 89.0% and 85.8%, respectively. In other words,
8 in fully racially/ethnically homogeneous and conformable block groups in
9 Texas, white registered voters have greater voter identification possession
10 rates than Hispanic and black registered voters.

11 As in my earlier analysis of the plaintiff algorithm, relaxing the cutoff for
12 racial/ethnic homogeneity introduces a degree of uncertainty as to true white,
13 Hispanic, and black voter identification possession percentages. This uncer-
14 tainty reflects the fact that, in a block group that is 99% white, one cannot
15 be completely certain that voter identification rates in the block group reflect
16 *white* voter identification rates. That is to say, the presence of non-whites in
17 a nearly racially/ethnically homogeneous block group confounds my ability
18 to characterize the voter identification possession rates of white registered
19 voters. As discussed previously, however, the degree of uncertainty caused
20 by the fact that nearly homogeneous block groups are not fully homogeneous
21 is captured in Figure 2 by the logical bounds around percentages of Texas
22 registered voters who do not possess valid forms of voter identification. Re-
23 call that logical bounds provide intervals in which rates of interest, i.e., the

1 white voter identification possession rate, must lie.

2 Figure 2 shows that, for values of the homogeneity cutoff down to 95%,
 3 the percentage of white registered voters in Texas who possess valid forms
 4 of voter identification can be distinguished from both Hispanic and black
 5 percentages; moreover, the white voter identification possession percentage is
 6 greater than corresponding black and Hispanic percentages. The implication
 7 of Figure 2 is straightforward. Based on racially/ethnically homogeneous and
 8 nearly homogeneous and conformable block groups, white registered voters
 9 in Texas are more likely to possess valid forms of voter identification than
 10 Hispanic or black registered voters in the state.

11 I created a version of Figure 2 which disregards registered voters who
 12 are unambiguously deceased as this concept has been earlier defined. Such a
 13 second version of the figure is qualitatively identical to the original.²⁰

14 **Racial/ethnic regression analysis**

15 One limitation of my earlier homogeneous and nearly homogeneous census
 16 block group analysis is its reliance on a particular set of block groups in Texas.
 17 Thus, Table 7 reports the results of estimating a weighted linear regression
 18 of voter identification possession percentages on block group racial/ethnic

19 ²⁰The plaintiff algorithm fields used to characterize the potentially deceased status of
 20 Texas registered voters are found in the file “texas_results_redacted.” The names of the
 21 fields are, for example, “dead_sld_dl,” which describes the extent to which a registered
 22 voter in the TEAM database was matched via Texas Sweep 1 to a record in the driver’s
 23 license part of the DPS database.

1 composition. The regression uses 11,949 block groups in Texas and is not
 2 restricted to homogeneous or nearly homogeneous block groups. The regres-
 3 sion is weighted by registered voters per census block because its dependent
 4 variable is itself a percentage that is normalized by registered voters per
 5 census block group.

Table 7:

	<i>Dependent variable:</i>
	Voter Identification Possession Percentage
Hispanic Percentage	-0.069 (0.001)
Black Percentage	-0.081 (0.001)
Constant	97.860 (0.040)
Observations	11,949
R ²	0.387

Note: standard errors in parentheses

6 The omitted category in the regression reported in Table 7 is white per-
 7 centage (approximately; across the 11,949 census block groups used in the
 8 regression, the average sum of white percentage plus Hispanic percentage
 9 plus black percentage is 96.12 ($s = 6.08$).) Thus, the estimated intercept
 10 in the table implies that the estimated percentage of white registered voters
 11 who possess valid forms of voter identification is approximately 97.9 percent.

1 A 95% confidence interval for this quantity is (97.8, 97.9).

2 Table 7's estimates of the percentages of Hispanic and black registered
 3 voters in Texas who possess valid forms of voter identification are approxi-
 4 mately 90.9% with an associated 95% confidence interval of (90.8, 91.1) and
 5 89.8% with an associated confidence interval of (89.5, 90.0), respectively.
 6 Moreover, the Hispanic and black estimates in Table 7 are statistically dis-
 7 tinguishable at the 0.05 level ($z \approx 7.95$).

8 The implication of Table 7 is as follows. White registered voters in Texas
 9 have a statistically significantly greater likelihood of possessing a valid form of
 10 voter identification compared to Hispanic registered voters in the state; and,
 11 Hispanic registered voters in Texas have a statistically significantly greater
 12 likelihood of possessing a valid form of voter identification compared to black
 13 registered voters in the state. This ordering parallels the ordering seen earlier
 14 (see Figure 2) in the homogeneous and nearly homogeneous census block
 15 analysis of the defendant algorithm.

16 I estimated a second version of the regression in Table 7 which disregards
 17 registered voters who are unambiguously deceased as this concept has been
 18 earlier defined. The results of such a regression are qualitatively identical to
 19 those in the table above.

20 I estimated a third version of the regression described in Table 7, this
 21 time restricting attention to conformable block groups in which percentage
 22 Hispanic plus percentage white plus percentage black is at least 97%. This
 23 regression has 7,473 block groups, and its conclusions are qualitatively very

1 similar to those based on Table 5. In particular, the second regression's
2 estimated white rate of valid voter identification possession is approximately
3 97.4% with corresponding Hispanic and black estimated rates of 90.6% and
4 88.2%, respectively.

5 **Analysis of plaintiff algorithm, as modified by** 6 **August 8, 2014, data**

7 On August 8, 2014, I received from plaintiffs' counsel a forwarded email
8 that was written on August 5, 2014, by Anna M. Baldwin of the United
9 States Department of Justice. Ms. Baldwin's email included a file named
10 "non_matches_among_previous_matches," and this file contains 183,408 Texas
11 vuids.

12 According to Ms. Baldwin's email, these vuids correspond to Texas reg-
13 istered voters whom the United States Department of Justice removed from
14 a matched list of registered voters.²¹ In addition, plaintiffs' counsel has in-
15 dicated that some of the 183,408 vuids had been previously matched by the
16 Department of Justice to Texas DPS identification records that had been
17 surrendered. Plaintiffs' counsel has also indicated that some of the vuids on

18 ²¹Ms. Baldwin's email contains the following two passages: "the United States has
19 removed certain TEAM records from being considered as matched to an eligible DPS
20 driver license or ID record" and "The attached list of VUIDs are no longer considered as
21 having matched."

1 the August 8, 2014, list may have been removed from the aforementioned
 2 Department of Justice match list by the Department of Justice because the
 3 Department has identified these voters as deceased.

4 The file “non_matches_among_previous_matches” I received does not dif-
 5 ferentiate between Texas registered voters whose DPS forms of identification
 6 have been surrendered and other types of registered voters. Thus, the follow-
 7 ing analysis assumes that all of the voters in the August 8, 2014, list should
 8 be treated as non-matches in the sense of not having a valid form of voter
 9 identification per SB 14.

10 I verified that the 183,408 voids in the August 8, 2014, list appear in the
 11 file “DOJ_results_redacted.” I checked as well to see whether these 183,408
 12 voids were identified by me via the plaintiff algorithm, primary or secondary
 13 sweep, as having been matched to a DPS record or records. I find that all
 14 but 79 of the voids appear on my list of matched Texas registered voters per
 15 the plaintiff algorithm, primary or secondary sweep.

Table 8: Summary of plaintiff algorithm results, treating registered Texas voters whose voids appear on the August 8, 2014, list as non-matches

Type	Matches	Non-matches	Match Percent
Primary and secondary sweeps	12,761,727	802,683	94.08
without deceased	12,713,527	800,678	94.07

Note: the dropped deceased matches are those that are unambiguously deceased in the sense that this term was used in Table 4. Percentages are reported to the nearest hundredth.

16 Based on the plaintiff algorithm, primary and secondary sweeps, and

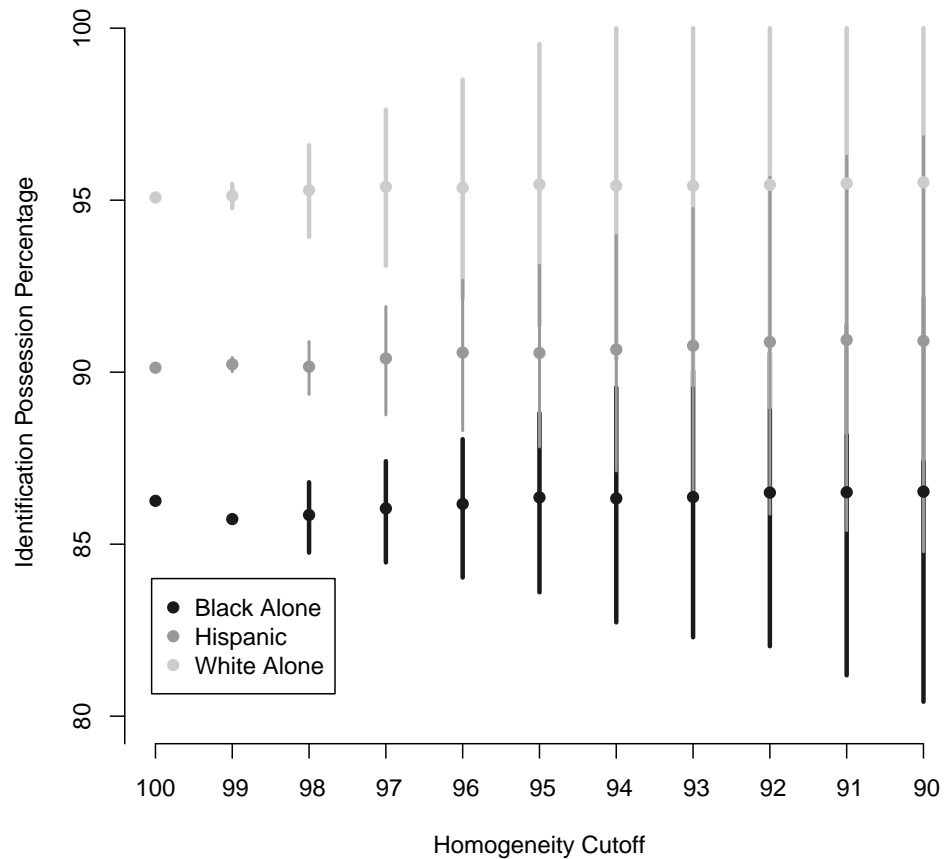
1 treating as non-matches Texas registered voters whose vuids are on the Au-
 2 gust 8, 2014, list of vuids, Table 8 reports the number of Texas registered
 3 voters who have valid forms of voter identification per SB 14 and those who
 4 do not. According to this table, 802,683 Texas registered voters lack valid
 5 forms of voter identification. If registered voters who are unambiguously
 6 deceased, in the sense defined earlier in this report, are removed from the
 7 analysis, then it follows that 800,678 Texas registered voters lack valid forms
 8 of voter identification per SB 14.²²

9 I was asked by plaintiffs' counsel to consider the racial/ethnic breakdown
 10 of the Texas registered voters who lack valid forms of voter identification,
 11 treating registered voters on the August 8, 2014, list as not possessing such
 12 identification. In response to this request, I generated Figure 3, which is
 13 analogous to Figures 1 and 2. This figure plots valid voter identification
 14 rates in homogeneous and nearly homogeneous Texas block groups, treating
 15 registered voters on the August 8, 2014, list as lacking valid voter identifica-
 16 tion.

17 Down to a homogeneity cutoff of 97%, Figure 3 shows that white Texas
 18 registered voters possess valid forms of voter identification at rates greater
 19 than Hispanic or black Texas registered voters.

20 ²²The number of non-matches in Table 8 decreases when unambiguously deceased reg-
 21 istered voters are dropped from the analysis. This is because 2,005 registered voters on
 22 the August 8, 2014, list were identified by the plaintiff algorithm as being unambiguously
 23 deceased as this term was used in the discussion surrounding Table 4.

Figure 3: Texas registered voter identification possession rates in homogeneous and nearly homogeneous block groups, based on plaintiff algorithm and treating registered Texas voters whose vuids appear on the August 8, 2014, list as non-matches



Note: describes overall voter identification rates in racially/ethnically homogeneous or nearly homogeneous block groups and logical bounds on corresponding racial/ethnic voter identification possession rates.

1 As in my previous analysis of the plaintiff algorithm, I estimated a
 2 weighted, census block group-level linear regression of valid identification
 3 possession rates on block group racial demographics. The results of this
 4 regression are in Table 9.

Table 9:

<i>Dependent variable:</i>	
Voter Identification Possession Percentage	
Hispanic Percentage	−0.046 (0.001)
Black Percentage	−0.079 (0.001)
Constant	96.312 (0.039)
Observations	11,949
R ²	0.311

Note: standard errors in parentheses

5 According to Table 9, the fraction of white registered voters in Texas who
 6 have valid forms of voter identification is approximately 96.3% with a 95%
 7 confidence interval of (96.2, 96.4). The corresponding fraction for Hispanic
 8 registered voters is 91.7% with a confidence interval of (91.6, 91.8); and for
 9 black registered voters the fraction having valid forms of voter identification
 10 is 88.5% with a confidence interval of (88.2, 88.7).

11 To the extent that some of the Texas registered voters on the August

1 8, 2014, list should not be treated as registered voters who lack valid voter
2 identification and should instead be removed from my analysis altogether,
3 the results of my analysis may change.

4 **Conclusion**

5 Based on data received on May 31, 2014, and amendments to this data re-
6 ceived on August 7, 2014, I find that over 600,000 registered Texas voters
7 do not appear to have been issued SB 14-qualifying forms of voter identifi-
8 cation. This conclusion does not depend on whether I use the results of a
9 plaintiff matching algorithm or the results of a defendant matching algorithm
10 to analyze the database of Texas registered voters. In addition, I find using
11 multiple analytical approaches that white registered voters in Texas possess
12 valid forms of voter identification at a higher rate than Hispanic and black
13 registered voters in the state.

14 Treating the 183,408 Texas registered voters who appear on the list of
15 registered voters that I received on August 8, 2014 as lacking valid forms
16 of voter identification, I find that approximately 800,000 registered voters
17 in Texas do not have valid forms of voter identification per SB 14. Based
18 on such a group of approximately 800,000 registered voters, I find using
19 multiple analytical approaches that white registered voters in Texas possess
20 valid forms of voter identification at a higher rate than Hispanic and black
21 registered voters in the state.

1 **A** United States Database Matching Protocol

2 IN THE UNITED STATES DISTRICT COURT
 FOR THE SOUTHERN DISTRICT OF TEXAS
 CORPUS CHRISTI DIVISION

<div>MARC VEASEY, <i>et al.</i>, Plaintiffs, v. RICK PERRY, <i>et al.</i>, Defendants.</div>	Civil Action No. 2:13-cv-193 (NGR)
<div>UNITED STATES OF AMERICA, Plaintiff, TEXAS LEAGUE OF YOUNG VOTERS EDUCATION FUND, <i>et al.</i>, Plaintiff-Intervenors, TEXAS ASSOCIATION OF HISPANIC COUNTY JUDGES AND COUNTY COMMISSIONERS, <i>et al.</i>, Plaintiff-Intervenors, v. STATE OF TEXAS, <i>et al.</i>, Defendants.</div>	Civil Action No. 2:13-cv-263 (NGR)

1

TEXAS STATE CONFERENCE OF NAACP
BRANCHES, *et al.*,

Plaintiffs,

v.

NANDITA BERRY, *et al.*,

Defendants.

Civil Action No. 2:13-cv-291 (NGR)

BELINDA ORTIZ, *et al.*,

Plaintiffs,

v.

STATE OF TEXAS, *et al.*,

Defendants

Civil Action No. 2:13-cv-348 (NGR)

United States' Database Matching Protocol

The United States hereby sets out its protocol for comparisons among and between the Texas databases and the federal databases. The matching process proceeds in four parts, which are explained in detail below. *First*, databases are prepared and standardized. *Second*, identifier values are constructed by combining multiple individual fields. *Third*, one-to-many matches are conducted between databases. *Fourth*, Texas data concerning deceased individuals is appended to matching output. Each of the four parts is divided into multiple stages, which in turn are divided into concrete steps.

The database preparation and standardization steps below apply to both the matches requested by the United States and all Plaintiffs, as well as the matches requested by Defendants.

GLOSSARY

The following definitions apply to the terms used in this document.

- **Disability database:** Any federal database containing records that indicate whether an individual has a disability that would permit that individual apply for an exemption from the SB 14 identification requirement.
- **Identification database:** Any Texas or federal database containing records that indicate whether an individual has identification required by SB 14 in most cases to cast an in-person ballot
- **Protocol:** The instructions to prepare data for matching and to conduct multiple matching sweeps between databases according to specified search criteria.
- **Sweep:** A comparison of a set of database fields in the TEAM database against a set of database fields in a disability database or an identification database.
- **TEAM database:** The Texas Election Administration Management database, the state database that contains records of registered voters.

PART I: DATABASE PREPARATION

Stage 1: Extraction of Available Data from TEAM, Identification & Disability Databases

- Step 1.1.1:** Extract complete name into separate first name, middle name, and last name fields.
- Step 1.1.2:** Extract date of birth.
- Step 1.1.3:** Extract gender.
- Step 1.1.4:** Extract residential address and mailing address.
- Step 1.1.5:** Extract social security number.
- Step 1.1.6:** Extract Texas driver license number (only if present in Federal database).
- Step 1.1.7:** Extract unique record identifier (such as VUID in the TEAM database).

Stage 2: Separate Valid Identification and Disability Records

- Step 1.2.1:** Remove records from identification database extracts that indicate that an ID has been revoked or has expired more than 60 days before the date of the TEAM database snapshot (which is January 15, 2014).
- Step 1.2.2:** Remove records from disability database extracts that do not indicate current disability status or indicate a Veterans Administration disability rating of less than 50%.
- Step 1.2.3:** Separate the identification databases produced by the State of Texas into separate files for each form of state identification at issue, namely driver licenses, identification cards, licenses to carry concealed handguns, and election identification certificates.

1

Stage 3: Diagnostics

- Step 1.3.1:** Report the frequency of missing values for each field.
- Step 1.3.2:** Report the frequencies of invalid Social Security numbers, such as 111111111 and 123456789.
- Step 1.3.3:** Report the frequencies of likely invalid dates of birth, such as January 1, 1901 and November 11, 1911.

Stage 4: Standardize Last Name

- Step 1.4.1:** Remove last name suffixes that are contained within the last name field, rather than a distinct suffix field. *E.g.*, <Smith Jr.> becomes <Smith>.
- Step 1.4.2:** For last names containing hyphens, populate separate last name fields for all parts of the last name. *E.g.*, the last name <Smith-Jones> would have the value <Smith> entered into a LastName1 field and the value <Jones> entered into a LastName2 field.
- Step 1.4.3:** Remove spaces, hyphens, periods, and apostrophes from all last name fields and convert all letters to uppercase. *E.g.*, <O'Connor> becomes <OCONNOR> and <Smith-Jones> becomes <SMITHJONES>.
- Step 1.4.4:** Code all missing values as blank fields.

1

Stage 5: Standardize First Name and Middle Name

Step 1.5.1: Remove spaces, hyphens, periods, and apostrophes from the first name field and convert all letters to uppercase. *E.g.*, <Jean-Paul> becomes <JEANPAUL>.

Step 1.5.2: Parse the first letter of the middle name (if available) and use it to populate a middle initial field. *E.g.*, <John> would yield <J>.¹

Step 1.5.3: Code all missing values as blank fields.

Stage 6: Standardize Date of Birth

Step 1.6.1: Convert the date of birth to an eight-digit string of MMDDYYYY.

Step 1.6.2: Code all missing values as blank fields.

Stage 7: Standardize Gender

Step 1.7.1: Code gender as a string of 1 for females and 0 for males.

Step 1.7.2: Fill missing gender values using the most common gender value for the first name associated with a record. *E.g.*, if 99% of records with first name <JOHN> are listed as male, assign the male identifier to all records with first name <JOHN> and no listed gender.

Step 1.7.3: If missing values remain, code all missing values as blank fields.

¹ The U.S. Department of State does not maintain a separate field for middle names in its database of U.S. Passport and Passport Card holders. Instead, both first and middle name may be stored in the first name field. For this database, the following rule will be applied: treat the first word in the first name field as the first name, and treat the first letter following the first space as the middle initial.

1

Stage 8: Standardize Address

- Step 1.8.1:** Convert the residential ZIP code to a string if it is stored as a numeric field.
- Step 1.8.2:** Where the residential address ZIP code is blank, populate that field with the value in the mailing address ZIP code field, if available.²
- Step 1.8.3:** Truncate the residential ZIP code field to the first five digits. *E.g.*, <77777-1234> becomes <77777>.
- Step 1.8.4:** Where the residential address field is blank, populate that field with the value in the mailing address field, if available.
- Step 1.8.5:** Where address field containing street address begins with a street number, isolate the street number. *E.g.*, <123 Main Street> becomes <123>.
- Step 1.8.6:** Where the address field begins with recognized strings indicating a mail box, eliminate strings to isolate the box number. *E.g.*, <PO Box 444> becomes <444>.
- Step 1.8.7:** If missing values remain, code all missing values as blank fields.

Stage 9: Standardize Social Security Number

- Step 1.9.1:** Convert the social security number to a string if it is stored as a numeric field.
- Step 1.9.2:** Using full social security number, check for invalid SSNs. In the case of invalid SSNs, code as missing. *E.g.*, <123456789> becomes <>.

² For purposes of this database matching protocol, the only address fields utilized with respect to data regarding U.S. Passports and U.S. Passport Cards are those regarding mailing addresses.

1

Step 1.9.3: Extract the last four digits of full social security number as a four-character string and use them to populate a separate SSN4 field.

Step 1.9.4: Code all missing values as blank fields.

Stage 10: Identical Records

Step 1.10.1: For the TEAM database, for the small number of records with different VUID but identical first and last name, gender, residential address number and ZIP, date of birth, and SSN, treat these records as identical.

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PART II: DATABASE PREPARATION**Stage 1: Construct Primary Identifier Variables for United States' One-to-Many Sweeps**

- Step 2.1.1:** Create Combination A: First Name + Last Name + Gender + Date of Birth + Residential ZIP + Residential Street Number. *E.g.*, the separate fields <JEAN>, <SMITH>, <0>, <01011950>, <77777>, and <123> are combined to a single field <JEANSMITH00101195077777123>.³
- Step 2.1.2:** Create Combination B: Last Name + Gender + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.3:** Create Combination C: Gender + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.4:** Create Combination D: First Name + Last Name + Date of Birth + Residential ZIP + Residential Street Number.
- Step 2.1.5:** Create Combination E: First Name + Last Name + Gender + Residential ZIP + Residential Street Number.
- Step 2.1.6:** Create Combination F: First Name + Last Name + Gender + Date of Birth.
- Step 2.1.7:** Create Combination M: Texas Driver License Number (where available).

³ For the U.S. Department of State only, the name portion of any combination is truncated if it is more than 32 characters long.

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Stage 2: Construct Secondary Identifier Variables for United States' One-to-Many Sweeps

- Step 2.2.1:** Create Combination G: First Name + Middle Initial + Last Name + Date of Birth.⁴
- Step 2.2.2:** Create Combination H: SSN4 + Date of Birth + Residential ZIP.
- Step 2.2.3:** Create Combination I: SSN4 + First Name + Last Name + Date of Birth.
- Step 2.2.4:** Create Combination K: First Name + Last Name 1 + Middle Initial + Date of Birth.
- Step 2.2.5:** Create Combination L: First Name + Last Name 2 + Middle Initial + Date of Birth.
- Step 2.2.6:** Full Social Security Number.

Stage 3: Establish Identifier Uniqueness

- Step 2.3.1:** Within the TEAM database, determine the uniqueness of each primary and secondary identifier variable and mark accordingly. *E.g.*, if only one record has the string <JEANSMITH0101195001237777> for Combination A, mark that record as unique for Combination A. By contrast, if multiple records have the string <JOHNSMITHA0101950> for Combination G, mark all such records as non-unique for Combination G.
- Step 2.3.2:** Within the identification and disability databases, generate a field that establishes the uniqueness of each identifier variable. For federal databases, for each combination, generate a field that establishes

⁴ Only for the State Department, create three further variations of Combination G using the State Department's "LFMName" field which contains Last, First, and Middle Names, in that order, truncated to a maximum length of 32 characters. Combination G1 is DOB + LFMName; Combination G2 is DOB + First two words of LFMName; and Combination G3 is DOB + First two words of LFMName + First character of third word of LFMName.

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uniqueness among only Texas records and a field that establishes uniqueness among nationwide records. *E.g.*, if only one record has the string <JEANSMITH0101195001237777> for Combination A, populate the uniqueness field for Combination A for that record as <1>. If four records have the string <JOHNSMITHA0101950> for Combination G, populate the uniqueness field for Combination G for each of those records as <2>, which indicates any number greater than one.

PART III: MATCH DATABASES

Stage 1: United States' Primary One-to-Many Matching Sweeps

- Step 3.1.1:** For each case in which Combination A is unique in the TEAM database, match Combination A against Combination A in the identification or disability database. For federal databases, use only the subset of records with Texas addresses in the identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination A output field. Where there is a match, indicate the uniqueness of Combination A in the identification or disability database in the Combination A output field (*e.g.*, in cases where there is one matching record in the Federal database, <1> should be inserted into the Combination A output field, while a <2> should be inserted into the Combination A output field if the TEAM record matched 2 or more records in the Federal database).
- Step 3.1.2:** Use the procedure in Step 3.1.1 to match Combination B, Combination C, Combination D, Combination E, and Combination F in the TEAM database against the equivalent combination field in the identification or disability database.
- Step 3.1.3:** Use the procedure in Step 3.1.1 to match Combination M in the TEAM database against the equivalent combination field in the identification databases produced by the State of Texas.

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Stage 2: United States' Secondary One-to-Many Matching Sweeps

Step 3.2.1: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), and where Combination G is unique in the TEAM database, match Combination G against Combination G in the identification or disability database. For federal databases, use only the subset of records with Texas addresses in the identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination G output field. Where there is a match, indicate the uniqueness of Combination G in the identification or disability database in the Combination G output field (*e.g.*, <1> if a unique match and <2> if matched to more than one record).

Step 3.2.2: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination H, Combination I, and complete social security number⁵ in the TEAM database against the equivalent combination/field in the identification or disability database.

Step 3.2.3: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination K against Combination G, Combination K, and Combination L in the identification or disability database.

⁵ The full social security number is not created as a separate "combination" as it is its own field stored within the TEAM database under the field name "ssn".

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Step 3.2.4: For each case in which no matches were found in the primary one-to-many matching sweeps (A-F, M), use the procedure in Step 3.2.1 to match Combination L against Combination G, Combination K, and Combination L in the identification or disability database.

Stage 3: United States' Nationwide Federal Database Sweeps

Step 3.3.1: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, and where Combination F is unique, match Combination F against Combination F in the nationwide identification or disability database. Where a match is attempted but no match is found, indicate a zero in the Combination F nationwide output field. Where there is a match, indicate the uniqueness of Combination F in the identification or disability database in the Combination F nationwide output field (*e.g.*, <1> if a unique match and <2> if matched to more than one record).

Step 3.3.2: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination G, Combination I, and full social security number in the TEAM database against the equivalent combination/field in the nationwide identification or disability database.

Step 3.3.3: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination

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K against Combination G, Combination K, and Combination L in the nationwide identification or disability database.

Step 3.3.4: For each case in which no matches were found in the primary and secondary matching sweeps of Texas records in a federal identification or disability database, use the procedure in Step 3.3.1 to match Combination L against Combination G, Combination K, and Combination L in the nationwide identification or disability database.⁶

⁶ Step 3.3.5 for the State Department only: Match the following Combination G variations from applicable State Department records, first to include only the subset of records with Texas addresses, and then to include all applicable U.S. Passport and Passport Card records nationwide (*e.g.*, without Texas addresses), against the following fields from the TEAM database:

- Combination G1 to DOB + Last_fix + First_fix + Middle_name from the TEAM database;
- Combination G2 to DOB + Last_fix + First_fix from the TEAM database;
- Combination G2 to DOB + Last_fix + First word of First_name from the TEAM database;
- Combination G3 to DOB + Last_fix + First_fix + Middle_Initial from the TEAM database;
- Combination G3 to DOB + Last_fix + First word of First_name + Middle_Initial from the TEAM database; and
- Combination G3 to DOB + Last_fix + First word of First_name + First character of Second word of First_fix from the TEAM database.

Attempt matches for all TEAM records, regardless of whether they matched in any prior sweeps. Indicate <1> if a unique match and <2> if matched to more than one record.

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PART IV: DATA GATHERING

Stage 1: Gather Information Regarding Deceased Individuals

- Step 4.1.1:** In all instances in which a unique match was achieved between the TEAM database and the Texas Driver License, Texas Identification Card, and Texas Concealed Handgun database, determine whether the identification record at issue has been flagged as deceased in the Texas identification database.
- Step 4.1.2:** Where the driver license, concealed handgun license, or Texas identification card record at issue has been flagged as deceased, append the “deceased” flag to the TEAM record to which the unique match has been made.

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B
Defendant matching algorithm

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Criteria for Matching Records in the TEAM Database

ID Matching			
Database	Valid ID	Matching Algorithm(s)	Additional Parameters
Texas Dept. of Public Safety	Driver's License	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Personal Identification Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Concealed Handgun License	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Texas Election Identification Certificate	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB 5. DL Number	ID unexpired or expired within 60 days of date that TEAM database was extracted
U.S. Department of Defense	Military ID-Common Access Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Military ID- Uniformed Services ID Cards	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	Military ID- DOD Civilian Retiree Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted

U.S. Dept. of Veterans Affairs	Veterans Affairs ID Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None.
U.S. Dept. of Homeland Security	U.S. Certificate of Citizenship	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None
	U.S. Certificate of Naturalization	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	None
U.S. State Department	U.S. Passport	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
	U.S. Passport Card	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	ID unexpired or expired within 60 days of date that TEAM database was extracted
Permanent Exemptions			
U.S. Social Security Administration	N/A	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	Determined to have a disability
U.S. Department of Veterans Affairs	N/A	1. SSN (Last Four) + Last Name + DOB 2. SSN (Full) 3. First Name +Last Name + DOB 4. First Name+Middle Initial+Last Name+DOB	Disability rating of 50% or more

Notes:

For each ID/Database combination outlined above all specified matching queries should be run. Based on the matching algorithms, if a record (registrant) in the TEAM database matches a record in the database being searched, then this will be denoted as a match (For any given type of SB14 ID, a registrant will be determined to have valid ID if matched by any of the matching algorithms outlined). New fields will be added to the TEAM database to denote the presence of a match for each database/ID/query. In addition to searching for ID possession, records in the TEAM database will be flagged to indicate the registrant is exempt due to the presence of a qualified disability. (Disclaimer: The matching algorithms here denoted are based on data fields currently known to populate the listed databases).

Explanation of matching queries to be run (numbers correspond to matching algorithms in table above):

1. Records will be matched using the last four digits of the Social Security Number (where available) along with the last name and date of birth fields.
2. Records will be matched using the full Social Security Number field (where available).
3. Records will be matched using the first name, last name, and date of birth fields.
4. Records will be matched using the first name, middle initial, last name, and date of birth fields.
5. Records will be matched using the Texas Driver's License Number field (where available).

1 C Description of geocoding exercise

2 To geocode addresses, my assistant followed a procedure recommended by
3 the United States Census Bureau; this procedure is described here: [http:](http://www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf)
4 [//www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf](http://www.census.gov/geo/education/pdfs/brochures/Geocoding.pdf).

5 I asked the assistant to describe in detail what he did, and his description
6 is as follows:

7 I downloaded the most recent Address Range Feature shapefiles for each
8 Texas county from the Census FTP servers, then loaded them into ArcGIS
9 10.2 and merged them together into one file. I used this file to create an
10 Address Locator file in ArcGIS, using the “US Address Dual Ranges” style,
11 which matches on street number, street name, and ZIP code.

12 Next, I broke the Texas voter file into separate files 500,000 addresses
13 long to ease the computational load, and used the Geocode Addresses tool
14 along with my Address Locator to match each address to a set of latitude
15 and longitude coordinates. The default settings were used in this process.

16 For the final step, I downloaded the 2010 Census block file for Texas
17 from the Census FTP servers, and used the Spatial Join tool to match the
18 geographic coordinates to Census blocks for each address, using the match
19 option of “HAVE_THEIR_CENTER_IN.” I then exported the attribute table
20 from each resulting shapefile, and reduced them down to just the relevant
21 columns for Professor Herrons analysis.

22 The same process was followed for mailing addresses, although I excluded

1 voters who had a P.O. Box for a mailing address, since ArcGIS would not
2 be able to geocode them, and I did not re-geocode voters who had match-
3 ing residential and mailing addresses, instead choosing to carry over their
4 coordinates and Census blocks from the previous operation.

5 After the geocoding process was completed, I encrypted the resulting text
6 files, and emailed them to Professor Herron.

1 D Michael Herron curriculum vitae

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Michael C. Herron

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Academic Appointments

William Clinton Story Remsen 1943 Professor, Department of Government, Dartmouth College. July, 2013 – present.

Chair, Program in Mathematics and Social Sciences, Dartmouth College. July, 2014 – present.

Professor, Department of Government, Dartmouth College. July, 2009 – June, 2013.

Visiting Professor of Applied Methods, Hertie School of Governance, Berlin, Germany. August, 2011 – August, 2012.

Associate Professor, Department of Government, Dartmouth College. July, 2004 – June, 2009.

Visiting Associate Professor, Department of Government, Harvard University. July, 2008 – January, 2009.

Visiting Associate Professor, Wallis Institute of Political Economy, University of Rochester. September, 2006 – December, 2006.

Visiting Assistant Professor, Department of Government, Dartmouth College. July, 2003 – June, 2004.

Assistant Professor, Department of Political Science, Northwestern University. September, 1997 – June, 2004.

Faculty Associate, Institute for Policy Research, Northwestern University. September, 2002 – June, 2004.

Education

PhD Business (Political Economics), Stanford University, January, 1998.

Dissertation: Political Uncertainty and the Prices of Financial Assets

Committee: David Baron, Darrell Duffie, Douglas Rivers, and Barry Weingast

MS Statistics, Stanford University, June, 1995.

MA Political Science, University of Dayton, August, 1992.

BS Mathematics and Economics, with University Honors, Carnegie Mellon University, May, 1989.

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Fellowships

Elizabeth R. and Robert A. Jeffe 1972 Fellowship, Dartmouth College. September, 2010 – June, 2011.

Fulbright Scholar Program fellowship for research and teaching at the Heidelberg Center for American Studies, Heidelberg University, September, 2009 - February, 2010 (declined).

Post-doctoral Research Fellow, Center for Basic Research in the Social Sciences, Harvard University. September, 2000 – August, 2001.

Publications

Journal Articles

"A Careful Look at Modern Case Selection Methods" (with Kevin M. Quinn). Forthcoming, *Sociological Methods & Research*.

"Race, Party, and the Consequences of Restricting Early Voting in Florida in the 2012 General Election" (with Daniel A. Smith). *Political Research Quarterly* 67(3): 646-665. 2014.

"The Effects of House Bill 1355 on Voter Registration in Florida" (with Daniel A. Smith). *State Politics & Policy Quarterly* 13(3): 279-305. 2013.

"Blacks, Hispanics, and Whites: A Study of Race-based Residual Vote Rates in Chicago." *American Politics Research* 41(2): 203-243. 2013.

"Alvin Greene? Who? How did he win the United States Senate nomination in South Carolina?" (with Joseph Bafumi, Seth J. Hill, and Jeffrey B. Lewis). *Election Law Journal* 11(4): 358-379. 2012.

"Souls to the Polls: Early Voting in Florida in the Shadow of House Bill 1355" (with Daniel A. Smith). *Election Law Journal* 11(3): 331-347. 2012.

"Leapfrog Representation and Extremism: A Study of American Voters and their Members in Congress" (with Joseph Bafumi). *American Political Science Review* 104(3): 519-542. 2010.

"Economic Crisis, Iraq, and Race: A Study of the 2008 Presidential Election" (with Seth J. Hill and Jeffrey B. Lewis). *Election Law Journal* 9(1): 41-62. 2010.

"Prejudice, Black Threat, and the Racist Voter in the 2008 Presidential Election" (with Joseph Bafumi). *Journal of Political Marketing* 8(4): 334-348. 2009.

"Voting Technology and the 2008 New Hampshire Primary" (with Walter R. Mebane, Jr., and Jonathan N. Wand). *William & Mary Bill of Rights Journal* 17(2): 351-374. 2008.

"Ballot Formats, Touchscreens, and Undervotes: A Study of the 2006 Midterm Elections in Florida" (with Laurin Frisina, James Honaker, and Jeffrey B. Lewis). *Election Law Journal* 7(1): 25-47. 2008.

"Gerrymanders and Theories of Lawmaking: A Study of Legislative Redistricting in Illinois" (with Alan E. Wiseman). *Journal of Politics* 70(1): 151-167. 2008.

"Estimating the Effect of Redistricting on Minority Substantive Representation" (with David Epstein, Sharyn O'Halloran, and David Park). *Journal of Law, Economics, and Organization* 23(2): 499-518. 2007.

"Did Ralph Nader Spoil Al Gore's Presidential Bid? A Ballot-Level Study of Green and Reform Party Voters in the 2000 Presidential Election" (with Jeffrey B. Lewis). *Quarterly Journal of Political Science* 2(3): 205-226. 2007.

"Assessing Partisan Bias in Voting Technology: The Case of the 2004 New Hampshire Recount" (with Jonathan N. Wand). *Electoral Studies* 26(2): 247-261. 2007.

"Term Limits and Pork" (with Kenneth W. Shotts). *Legislative Studies Quarterly* 31(3): 383-404. 2006.

"Black Candidates and Black Voters: Assessing the Impact of Candidate Race on Uncounted Vote Rates" (with Jasjeet S. Sekhon). *Journal of Politics* 67(1): 154-177. 2005.

"Government Redistribution in the Shadow of Legislative Elections: A Study of the Illinois Member Initiatives Grant Program" (with Brett A. Theodos). *Legislative Studies Quarterly* 24(2): 287-312. 2004.

"Studying Dynamics in Legislator Ideal Points: Scale Matters." *Political Analysis* 12(2): 182-190. 2004.

"Logical Inconsistency in EI-based Second Stage Regressions" (with Kenneth W. Shotts). *American Journal of Political Science* 48(1): 172-183. 2004.

"Overvoting and Representation: An examination of overvoted presidential ballots in Broward and Miami-Dade counties Counties" (with Jasjeet S. Sekhon). *Electoral Studies* 22: 21-47. 2003.

"Using Ecological Inference Point Estimates as Dependent Variables in Second Stage Linear Regressions" (with Kenneth W. Shotts). *Political Analysis* 11(1): 44-64. 2003.

"Cross-contamination in EI-R" (with Kenneth W. Shotts). *Political Analysis* 11(1): 77-85. 2003.

"A Consensus on Second Stage Analyses in Ecological Inference Models" (with Christopher Adolph, Gary King, and Kenneth W. Shotts). *Political Analysis* 11(1): 86-94. 2003.

"The Butterfly Did It: The Aberrant Vote for Buchanan in Palm Beach County, Florida" (with Jonathan N. Wand, Kenneth W. Shotts, Jasjeet S. Sekhon, Walter R. Mebane, Jr., and Henry E. Brady). *American Political Science Review* 95(4): 793-810. 2001.

"Interest Group Ratings and Regression Inconsistency." *Political Analysis* 9(3): 260-274. 2001.

"Leadership and Pandering: A Theory of Executive Policymaking" (with Brandice Canes-Wrone and Kenneth W. Shotts). *American Journal of Political Science* 45(3): 532-550. 2001.

"Law and Data: The Butterfly Ballot Episode" (with Henry E. Brady, Walter R. Mebane, Jr., Jasjeet S. Sekhon, Kenneth W. Shotts, and Jonathan N. Wand). *PS: Political Science & Politics* 34(1): 59-69. 2001.

"Cutpoint-Adjusted Interest Group Ratings." *Political Analysis* 8(4): 346-366. 2000.

"Estimating the Economic Impact of Political Party Competition in the 1992 British Election." *American Journal of Political Science* 44(2): 326-337. 2000.

"Artificial Extremism in Interest Group Ratings and the Preferences versus Party Debate." *Legislative Studies Quarterly* 24(4): 525-542. 1999.

"Post-Estimation Uncertainty in Limited Dependent Variable Models." *Political Analysis* 8(1): 83-98. 1999.

"Measurement of Political Effects in the United States Economy: A Study of the 1992 Presidential Election" (with James Lavin, Donald Cram, and Jay Silver). *Economics & Politics* 11(1): 51-81. 1999.

"The Influence of Family Regulation, Connection, and Psychological Autonomy on Six Measures of Adolescent Functions" (with Melissa R. Herman, Sanford M. Dornbusch, and Jerald R. Herting). *Journal of Adolescent Research* 12(1): 34-67. 1997.

Michael C. Herron

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Book Chapters

"A Dynamic Model of Multidimensional Collective Choice" (with David P. Baron). *Computational Models in Political Economy*, Ken Kollman, John H. Miller, and Scott E. Page, eds. Cambridge, MA: The MIT Press. 2003.

"Law and Data: The Butterfly Ballot Episode" (with Henry E. Brady, Walter R. Mebane Jr., Jasjeet Singh Sekhon, Kenneth W. Shotts, and Jonathan Wand). *The Longest Night: Polemics and Perspectives on Election 2000*, Arthur J. Jacobson and Michel Rosenfeld, eds. Berkeley: University of California Press. 2002.

Book Reviews

The Timeline of Presidential Elections: How Campaigns Do (and Do Not) Matter, Robert S. Erikson and Christopher Wlezien. *Political Science Quarterly* 128(3): 552-553. 2013.

Voting Technology: The Not-So-Simple Act of Casting a Ballot, Paul S. Herron, Richard G. Niemi, Michael J. Hanmer, Benjamin B. Bederson, and Frederick C. Conrad. *Review of Policy Research* 25(4): 379-380. 2008.

Other Publications

"High ballot rejection rates should worry Florida voters" (with Daniel A. Smith). *Tampa Bay Times*, October 28, 2012.

"Logistic Regression." *The Encyclopedia of Political Science*, George Thomas Kurian, James E. Alt, Simone Chambers, Geoffrey Garrett, Margaret Levi, and Paula D. McClain, eds., Washington, D.C.: CQ Press. 2010.

"Using XEmacs Macros to Process ASCII Data Files." *The Political Methodologist* 13(2): 13-18. 2005.

"Ohio 2004 Election: Turnout, Residual Votes and Votes in Precincts and Wards" (with Walter R. Mebane, Jr.), in "Democracy At Risk: The 2004 Election in Ohio," report published by the Democratic National Committee. 2005.

"Poisson Regression." *The Encyclopedia of Social Science Research Methods*, Alan Bryman, Michael Lewis-Beck, and Tim Futing Liao, eds. Thousand Oaks, CA: Sage Publications, 2003.

"Pork barrel race to the bottom" (with Brett A. Theodos). *Illinois Issues* 29(2): 22-23. 2003.

"Teaching Introductory Probability Theory." *The Political Methodologist* 10(2): 2-4. 2002.

"Ballot cost Gore thousands of votes" (with Henry E. Brady and Jonathan N. Wand). *The San Diego Union-Tribune*, p. G3, November 19, 2000.

Work in Progress

"Race, Shelby County, and the Voter Information Verification Act in North Carolina" (with Daniel A. Smith).

"Precinct Closing and Wait Times in Florida during the 2012 General Election" (with Daniel A. Smith).

Michael C. Herron

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Awards

Best Paper Award, State Politics and Policy Section, 2012 Annual Meeting of the American Political Science Association. *Getting Your Souls to the Polls: The Racial Impact of Reducing Early In-Person Voting in Florida* (with Daniel A. Smith).

Grants

The Rockefeller Center for Public Policy and the Social Sciences, May, 2006. Project title: "Large Scale Survey of Americans in Multiple Congressional Districts." Financial support: \$8,500.

National Science Foundation, SES-041849, July, 2004. Project title: "A Ballot-Level Study of Intentional and Unintentional Abstention in Presidential Election Voting." Financial support: \$65,749.

Nelson A. Rockefeller Center for the Social Sciences, Dartmouth College, January, 2004. Project title: "Intentional Invalid Votes in Leon County, Florida." Financial support: \$1115.

American Enterprise Institute, August, 1999. Project title: "Tenure in Office and Congressional Voting" (with Kenneth W. Shotts). Financial support: \$182,500.

Northwestern University Research Grants Committee, February, 1999. Project Title: "Representation, Policy Uncertainty, and Divided Government." Financial support: \$4087.

Stanford University Graduate School of Business, 1997–1998 Academic Year. Dissertation Research Grant.

Recent Conference Presentations

"Legislative District Compactness and Court Precedent," 2013 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"High School History Textbook Coverage of the 2000 Presidential Election," 2010 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"The Uses and Limitation of Hard Case Analysis," 2008 Northeast Political Methodology Meeting, New York, NY.

"The Uses and Limitation of Hard Case Analysis," 2008 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"Voting Technology and the 2008 New Hampshire Primary," 2008 William & Mary School of Law Conference, *How We Vote*, Williamsburg, VA.

"Representation and American Political Institutions," 2007 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

"From Punchcards to Touchscreens: Some Evidence from Pasco County, Florida on the Effects of Changing Voting Technology," 2006 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

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Michael C. Herron

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Invited Seminars

University of Iowa, 1999	University of Chicago, 2007
Boston University, 2000	Yale University, 2007
Dartmouth College, 2000	Stanford University, 2008
Harvard University, 2000	Columbia University, 2008
University of Minnesota, 2000	Northwestern University, 2008
University of Rochester, 2000	Princeton University, 2008
University of Wisconsin, Madison, 2000	Duke University, 2009
Yale University, 2000	Hertie School of Governance, 2010
Columbia University, 2001	Emory University, 2010
University of California, Berkeley, 2002	University of Mannheim, 2011
University of Illinois, 2002	University of Heidelberg, 2011
Brown University, 2003	University of Passau, 2012
Temple University, 2003	University of Göttingen, 2012
University of Chicago, 2003	Freie Universität Berlin, 2012
New York University, 2004	Laval University, 2012
Princeton University, 2004	University of Montreal, 2012
University of Michigan, 2005	Middlebury College, 2013
George Washington University, 2006	University of Illinois, Champaign, 2013
Emory University, 2006	University of Illinois, Chicago, 2013
Harvard University, 2007	University of Wisconsin, Madison, 2013
Loyola Law School, 2007	Yale University, 2014
Columbia University, 2007	

Teaching Interests

Statistical Methods: introductory and advanced econometrics, research design, Bayesian statistics

American Politics: Congress, contemporary legislative theory, comparative legislative institutions, institutional design, elections, election irregularities

Political Economy: game theory

Dartmouth College Activities

Committee on Priorities, July, 2013 – present.

Research Computing Director search committee, October, 2013 – present.

Senior Search Committee, Department of Government, 2013.

Research Computing Advisory Committee, Spring 2013.

Chair, American Politics Search Committee, Department of Government, 2012-2013.

Recruitment Planning Committee, Department of Government, 2010 and 2012-2013.

Committee on Standards, 2008-2010.

Task Force on Collaboration and Social Software, 2007-2008.

Biostatistics search committee, Dartmouth Medical School, 2006-2007.

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Research Computing Oversight Committee, 2006.

Council on Computing, 2005-2007.

Clement Chair search committee, Department of Government, 2005-2006.

Professional Activities

"Race, Voting Procedures, and New Developments in Voting Rights," panel organized for the 2013 Annual Meeting of the Midwest Political Science Association.

Editorial Board, *USENIX Journal of Election Technology and Systems*, March, 2013–present.

Editorial Board, *Political Analysis*, January, 2010–present.

Editorial Board, *American Political Science Review*, 2010–2012.

Editorial Board, *American Journal of Political Science*, 2006–2009.

Division Chair, Formal Theory Section, 2007 Annual Meeting of the American Political Science Association.

Co-editor, *The Political Methodologist*, Fall, 2004–Spring, 2006.

Publications Committee of the Society for Political Methodology, 2005–2006.

Reviewer for

<i>American Journal of Political Science</i>	The National Science Foundation
<i>American Political Science Review</i>	<i>Perspectives on Politics</i>
<i>American Politics Quarterly</i>	<i>Political Analysis</i>
<i>American Politics Review</i>	<i>Political Behavior</i>
<i>British Journal of Political Science</i>	<i>Political Research Quarterly</i>
Cambridge University Press	<i>Political Studies</i>
Chapman & Hall	<i>Politics & Gender</i>
<i>Du Bois Review</i>	<i>Policy Studies Journal</i>
<i>Economics & Politics</i>	Prentice Hall Higher Education Group
<i>Election Law Journal</i>	<i>Proceedings of the National Academy of Sciences</i>
<i>Electoral Studies</i>	<i>Public Administration</i>
<i>Emerging Markets Finance & Trade</i>	<i>Public Choice</i>
<i>Interest Groups & Advocacy</i>	<i>Public Opinion Quarterly</i>
John Wiley & Sons, Inc.	<i>PS: Political Science and Politics</i>
<i>Journal of Legal Studies</i>	<i>Quarterly Journal of Political Science</i>
<i>Journal of Money, Credit and Banking</i>	<i>The Social Science Journal</i>
<i>Journal of Politics</i>	<i>Sociological Methods & Research</i>
<i>Journal of Public Economics</i>	Springer
<i>Journal of Theoretical Politics</i>	<i>State Politics & Policy Quarterly</i>
<i>Journal of Women, Politics & Policy</i>	The University of Michigan Press
<i>Legislative Studies Quarterly</i>	<i>World Politics</i>

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Other Employment

Intelligence Analyst and Military Officer, United States Air Force, Foreign Technology Division,
Wright-Patterson Air Force Base, 1989–1992.

Last updated: August 13, 2014
<http://www.dartmouth.edu/~herron/cv.pdf>

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